

ENCOURAGING YOUNG SURGEONS AND ENGINEERS

30° Congresso Nazionale SPIGC

9th Joint Workshop on New Technologies
for Computer/Robot assisted Surgery

GENOVA

21-22 MARZO 2019

Tower Genova Airport Hotel
Via Pionieri e Aviatori d'Italia, 44 Genova

PROGRAMMA

Presidente

Davide Pertile

Presidente Onorario

Domenico Palombo

Coordinatore Scientifico

Stefano Scabini

Coordinatore Scientifico CRAS

Leonardo De Mattos

www.30congressospigc.it



Con il patrocinio di



30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

MEET THE EXPERT: 45 MINUTES WITH...

THURSDAY 21ST MARCH

Sala Colombo

10:30 a.m. - 11:15 a.m.

Micaela Piccoli

11:15 a.m. - 12:00 p.m.

Giuseppe Spinoglio

12:00 p.m. - 12:45 p.m.

Paolo Delrio

12:45 p.m. - 01:30 p.m.

Paolo Pietro Bianchi

FRIDAY 22ND MARCH

Sala Colombo

09:30 a.m. - 10:15 a.m.

Mario Testini

11:00 a.m. - 11:45 p.m.

Francesco Corcione

12:00 p.m. - 12:45 p.m.

Cristiano Husher

THURSDAY 21ST MARCH

Plenary Room

09:30 a.m. **Surgical Staplers** **1,4 crediti ECM**
11:30 a.m.

11:30 a.m. Coffee Break

11:30 a.m. **Vital Dyes** **1,4 crediti ECM**
01:30 p.m.

01:30 p.m. Break

02:30 p.m. **Robotic Surgery** **1,4 crediti ECM**
04:30 p.m.

04:30 p.m. **Surgery and Technology....4.0 Vision**
06:00 p.m.

06:00 p.m. **Opening Ceremony**
07:00 p.m.

THURSDAY 21ST MARCH

PLENARY ROOM

9.30 a.m. - 11.30 a.m.

Surgical Staplers

Presidents: M. Degiuli (Torino), P. Delrio (Napoli)

Chairmen: S. Rausei (Gallarate), D. Rega (Napoli)

Panelists: P. Fiorini (Verona), G. Muriana (Mantova), E. Romairone (Genova)

How to develop a stapler. Safety in operating room

09:30 F. Bilotti (Milano)

The point of view of the surgeon: which one? Too many staplers?

09:40 G. Pariscenti (Genova)

HOW I DO IT

Colorectal anastomosis

09:50 A. Mazzari (Roma)

09:57 Expert: F. Priora (Alessandria)

Ileocolic anastomosis

10:00 G. Girardo (Cuneo)

10:07 Expert: G. Anania (Ferrara)

Esophago-jejunostomy

10:10 G. Casoni Pattacini (Genova)

10:17 Expert: A. Patrìti (Pesaro)

Sleeve gastrectomy

10:20 A. Iossa (Roma)

10:27 Expert: P. Millo (Aosta)

THE FUTURE?

Robotic suturing

10:30 F. Ficuciello (Napoli)

Human-in-the-loop robot-assisted suturing

10:40 Y. Sharon

Take home message

10:50 D. D'Ugo (Roma)

SELECTED ABSTRACT

10:55 **Early diagnosis of anastomotic leakage after elective colorectal surgery: a prospective multicenter observational study on the dutch leakage score, serum procalcitonin and serum c-reactive protein.**

The italian colorectal anastomotic leakage (icral) study group

Paolo Ciano, Giacomo Ruffo, Felice Borghi, Alberto Patriiti, Paolo Delrio, Marco Scatizzi, Stefano Mancini, Gianluca Garulli, Alessandro Carrara, Felice Pirozzi, Stefano Scabini, Andrea Liverani, Gianluca Baiocchi, Roberto Campagnacci, Andrea Muratore, Graziano Longo, Marco Caricato, Raffaele Macarone Palmieri, Nereo Vettoreto, Benedetta Ruggeri, Gianluca Guercioni, Marco Catarci

11:02 **Intraoperative angiography with indocyanine-green to assess anastomosis perfusion in patients undergoing laparoscopic colorectal resection: results of a randomized controlled trial**

Giulia Maggi, Paola De Nardi, Riccardo Maggiore, Luigi Boni, Elisa Cassinotti, Uberto Fumagalli, Marco Gardani, Ugo Elmore, Andrea Vignali, Riccardo Rosati

11:09 **New technologies in robot-assisted rectal resection: table motion for da vinci xi, endowrist robotic staplers and indocyanine green fluorescence**

Gregorio Di Franco, Niccolò Furbetta, Desirée Gianardi, Simone Guadagni, Gianni Stefanini, Matteo Palmeri, Cristiano D'Isidoro, Matteo Bianchini, Giovanni Caprili, Luca Morelli

THURSDAY 21ST MARCH

PLENARY ROOM

11.30 a.m. – 01.30 p.m.

Vital Dyes

President: R. Petri (Udine)

Chairmen: P. Fregatti (Genova), L. Ruspi (Milano)

Panelists: S. Berti (La Spezia), F. Cafiero (Genova), D. Friedman (Genova), S. Moccia (Ancona)

Lecture: prophylaxis of the biliary tracts lesion during cholecystectomy

11:30 L. Boni (Milano)

Prophylaxis of thoracic duct lesion during thoracic surgery

11:40 A. Martino (Udine)

11:47 Expert: F. Roviello (Siena)

Evaluation of vascular perfusion during colorectal surgery

11:50 T. Cipolat (Trieste)

11:57 Expert: G. Baiocchi (Brescia)

Lung segments demarcation and search for intraparenchymal nodules

12:00 M. Manitto (Genova)

12:07 Expert: G. Leoncini (Genova)

Sentinel node localisation during oncologic breast surgery

12:10 A. Girardi (Bari)

12:17 Expert: G. Lissidini (Milano)

Sentinel node localisation during surgery for uterine malignancy

12:20 F. Falcone (Avellino)

12:27 Expert: S. Uccella (Biella)

Evaluation of vascular support during free flap

12:30 M. Maruccia (Bari)

12:37 Expert: E. Cigna (Pisa)

Surgical guidance

12:40 E. De Momi (Milano)

Digital Dyes what are these?

12.47

V. Penza (Genova)

SELECTED ABSTRACT

12.54

Fluorescent lymphography–guided lymphadenectomy during gastrectomy for gastric cancer

Molteni Beatrice, Porsio Paola, Molfino Sarah, Alfano Marie Sophie, Benedicenti Sara, Portolani Nazario, Baiocchi Gianluca

01.01

Axillary staging during the era of the sentinel lymph node biopsy in breast cancer. Standard methods and the use of indocyanine green and hypereye medical system,in a comparison between effectiveness and efficiency

Raquel Diaz, Daniele Friedman, Piero Fregatti, Federica Murelli, Marco Gipponi, Francesca Depaoli

01.08

Indocyanine green a “google maps” for first steps

Marco Giovenzana, Nicolò maria Mariani, Caterina Froiio, Gabriele Epifani, Andrea Pisani Ceretti, Enrico Opocher

01.15

Convolutional network for multi-planar pose prediction in medical imaging

B. M. Maris, E. Ghignoni, P. Fiorini

01.22

Calibration of optical see-through head mounted display for in-situ visualization of radiological images

Nadia Cattari, Umberto Fontana, Fabrizio Cutolo, Sara Condino, Vincenzo Ferrari, Mauro Ferrari

THURSDAY 21ST MARCH

PLENARY ROOM

02.30 p.m. - 04.30 p.m.

Robotic Surgery

President: G. De Sena (Napoli)

Chairmen: D. Cavaliere (Forli), G. Ceccarelli (Spoleto)

Panelists: F. Borghi (Cuneo), F. Priora (Alessandria), C. Terrone (Genova), M. Testini (Bari),
E. Vander Poorten (BE)

Lecture: the evolution of technology rise of robotics in surgery

02:30 G. Spinoglio (Milano)

WHERE ARE WE NOW?

Perception in robotic surgery

02:40 P. Fiorini (Verona)

Learning curve and training in robotic surgery

02:47 G. Formisano (Grosseto)

Artificial intelligence

02:54 S. Mancuso (Pordenone)

VIDEOFORUM PEARLS, PERILS, AND PITFALLS OF ROBOTICS IN ABDOMINAL AND PELVIC SURGERY

GI - Robotic gastrectomy lymphadenectomy and reconstruction

03:01 A. Marano (Cuneo)

03:08 Expert: A. Coratti (Firenze)

GYN - Robotic aortic lymphadenectomy in endometrial cancer

03:11 G. Vizzielli (Roma)

03:18 Expert: F. Alessandri (Genova)

HPB - Robotic DCP tips and tricks

03:21 M. De Luca (Bari)

03:28 Expert: U. Boggi (Pisa)

URO - Robotic partial nephrectomy

03:31 P. Traverso (Genova)

03:38 Expert: C. Giberti (Savona)

TOR - Robotic lobectomy

03:41 C. Zirafa (Pisa)

03:48 Expert: F. Melfi (Pisa)

SURGEON & ENGINEER. HOW TO MOVE FORWARD?

What does the surgeon expect

03:51 P.P. Bianchi (Grosseto)

What the engineer can offer

03:58 B. Davies (UK)

SELECTED ABSTRACT

04:05 **Combining machine learning and kinematic analysis to control medical cable-driven flexible instruments**

Rafael Aleluia Porto, Florent Nageotte, Philippe Zanne, Michel de Mathelin

04:12 **Toward a knowledge-based framework for task automation in surgery**

Michele Ginesi, Daniele Meli, Hirenkumar Nakawala, Andrea Roberti, Andrea Calanca, Paolo Fiorini

04:19 **Robotic-assisted ventral hernia surgery: outcomes of the first 56 cases**

Dimitri Krizzuk, Sofia Esposito, Lucia Salvischiani, Dario Sirimarco, Giampaolo Formisano, Paolo Pietro Bianchi

THURSDAY 21ST MARCH

PLENARY ROOM

04.30 p.m. - 06.00 p.m.

Surgery and Technology....4.0 Vision

Chairman: S. Scabini (Genova)

2019. It's just the starting point ...

04:30 D. Cavaliere (Forli)

The power of light

04:40 L. De Mattos (Genova)

Gap Generation

04:50 S. Uccella (Biella)

... Houston...we have a problem!

05:00 E. Guaitoli (Brindisi)

05:10 Round Table "God save the ... (Young) Surgeon"

Chairman:

● T. Oberti (Genova)

Panelists:

● P. De Paolis (Torino)

● F. Latorre (Roma)

● P. Marini (Roma)

● F. Mereta (Genova)

● M. Minerva (Milano)

● F. Monteverde (Genova)

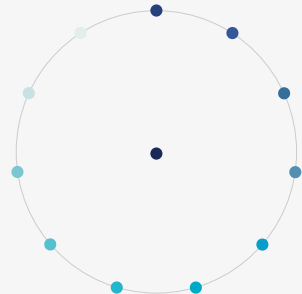
● M. Montorsi (Milano)

● M. Morino (Torino)

● D. Palombo (Genova)

● D. Pertile (Genova)

● S. Viale (Genova)



The future is now

05:45 D. Caldwell (Genova)

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

THURSDAY 21ST MARCH

Ponte B e Ponte C Room

09:30 a.m. **Biological and synthetic prostheses** **1,4 crediti ECM**
11:30 a.m.

11:30 a.m. Coffee Break

11:30 a.m. **Surgical Training** **2 crediti ECM**
01:30 p.m.

01:30 p.m. Break

02:30 p.m. **Microsurgery** **1,4 crediti ECM**
04:30 p.m.

THURSDAY 21ST MARCH

PONTE B E PONTE C ROOM

09.30 a.m. - 11.30 a.m.

Biological and synthetic prostheses

President: G. Silecchia (Latina)

Chairmen: F. Berton (Trieste), A. Martino (Genova)

Panelists: A. Cagnazzo (Genova), G. Faillace (Milano), S. Testa (Vercelli)

09:30 **Lecture: HTA for prostheses in surgery between benefit and cost**
N. Vettoreto (Montichiari)

Debate Session

THORACIC WALL RECONSTRUCTION

Biologic

09:40 M. Manitto (Genova)

Synthetic

09:47 M. S. Gallazzi (Brescia)

09:54 Expert opinion: C. Risso (Genova)

ABDOMINAL WALL RECONSTRUCTION

Biologic

09:57 F. Lazzara (Acqui Terme)

Synthetic

10:04 S. Molfino (Milano)

10:11 Expert opinion: C. Stabilini (Genova)

PRE-PECTORAL MAMMARIAN RECONSTRUCTION WITH MESH

Biologic

10:14 C. Fante (Parma)

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

Synthetic

- 10:21 M. Marcasciano (Roma)
10:28 Expert opinion: I. Baldelli (Genova)

Mandibular reconstruction with custom made devices

- 10:31 G. Bettini (Padova)

The future of 3d printer in medicine

- 10:41 S. Marconi (Pavia)

SELECTED ABSTRACT

- 10:51 **Laparoscopic rives technique for diastasis recti and ventral hernia: feasibility of a fully minimally invasive abdominal wall reconstruction**
Sara Capoccia Giovannini, Cesare Stabilini, Marco Casaccia, Tommaso Testa, Rosario Fornaro, Ezio Gianetta, Marco Frascio
- 10:58 **Computer-aided design/computer-aided manufacturing iliac reconstruction following chimeric deep circumflex iliac artery flap harvesting for head and neck composite defects**
Nick Salimian, Giorgia Menapace, Nooshin Abbasi, Alberto Bedogni, Giordana Bettini
- 11:05 **Posterior component separation with transversus abdominis release: a single center**
Francesco Maria Carrano, Riccardo Broggi, Livia Manfredini, Caterina Franchi, Davide Inversini, Andrea Romanzi, Giuseppe Ietto, Gabriele Soldini, Lorenzo Latham, Giulio Carcano

THURSDAY 21ST MARCH

PONTE B E PONTE C ROOM

11.30 a.m. – 01.30 p.m.

Surgical Training

President: M. Piccoli (Modena)

Chairmen: D. Soriero (Genova), C. Vallicelli (Bologna)

Panelists: J. Dankelman (USA), R. De Luca (Bari), A. Giardino (Peschiera del Garda),
M. Longoni (Milano), G. Mattioli (Genova), G. Melotti (Modena), L. Morelli (Pisa),
L. Reggiani (Pietra Ligure)

HOT TOPICS

The value of a comprehensive hands-on surgical simulation center : results of ten years of experience of the AIMS Academy

11:30 A. Forgione (Milano)

Designing algorithms and methods for surgical skills analysis and performance assessment

11:40 E. Mazomenos (UK)

How much does the surgical training cost?

11:50 A. Pasculli (Bari)

Surgery in epileptogenic tumours

12:00 A. Consales (Genova)

Laparoscopic incisional hernia repair

12:07 M. Sparavigna (Genova)

Multi center validation trial of fundamentals of robotic surgery

12:14 A. Moglia (Pisa)

Lecture: the future of surgical training

12:21 P. Jannin (F)

12:36 Experts: A. Mazzari (Roma), D. Piazza (Catania)

SELECTED ABSTRACT

- 12:46 Can a trainee safely learn vats lobectomy without open lobectomy experience?**
Alessandra Mazzucco, Alessandro Palleschi, Davide Tosi, Lorenzo Rosso, Francesco Damarco, Valeria Musso, Margherita Cattaneo, Paolo Mendogni, Mario Nosotti
- 12:53 Design and fabrication of synthetic, silicone-based tissue and organ models for surgical simulations**
Burcin Ustbas Gul, Deniz Kilic Yanilmaz , Cem Yilmaz, Mehmet Bayramicli, Ozge Akbulut
- 01:00 A physical/virtual anatomical platform for hysteroscopy training**
A. Hernansanz, R. Martínez, R. Rovira, A. Casals
- 01:07 Validation of a simulator set up entirely in an academic setting: low-cost surgical trainer rather than high-cost**
Gianluca Marcocci, Michele Minuto, Domenico Soriero, Gregorio Santori, Marco Sguanci, Francesca Mandolino, Marco Casaccia, Rosario Fornaro, Cesare Stabilini, Gianni Vercelli, Simone Marcutti, Marco Gaudina, Francesca Stratta, Marco Frascio
- 01:14 Training in total thyroidectomy in Europe. A multicenter study**
Roberta Maria Isernia, Antonia Girardi, Giovanna Di Meo, Giuseppe Cavallaro, Giovanni Conzo, Giovanni Docimo, Maurizio Iacobone, Celestino Pio Lombardi, Michele Minuto, Fausto Palazzo, Marco Raffaelli, Frederic Sebag, Gabriele Materazzi, Angela Gurrado, Mario Testini

THURSDAY 21ST MARCH

PONTE B E PONTE C ROOM

02.30 p.m. – 04.30 p.m.

Microsurgery

President: F. Boccardo (Genova)

Chairmen: F. Lo Torto (Roma), M. Maruccia (Bari), S. Spinaci (Genova)

Panelists: C. Eretta (La Spezia), E. Grant (USA), F. Pozzi (Varese), G. Zona (Genova)

Lecture: training in microsurgery

02:30 E. Cigna (Pisa)

STATE OF THE ART

Laparoscopic microsurgery lymphnode sampling

02:40 R. Elia (Bari)

Lympho-venous anastomosis

02:47 C. Campisi (Genova)

Hand surgery

02:54 L. Troisi (Trieste)

Free flaps in plastic surgery

03:01 L. Losco (Pisa)

Neurosurgery

03:08 A. Cama (Genova)

Transoral/Transnasal microsurgery

03:15 A. Carobbio (Genova)

THE FUTURE

Robot assisted systems for microsurgery

03:22 B. Herman (BE)

Assistive interfaces for high precision surgery

03:29 N. Deshpande (Genova)

TAKE HOME MESSAGE

03:36 F. M. Senes (Genova)

SELECTED ABSTRACT

03:41 **Implementation of robot-assisted laser micromanipulation systems and 3-d exoscopic visualization in transoral treatment of upper aero-digestive tract (uadt) diseases: is this a real alternative to transoral robotic surgery (tors)?**

Andrea Luigi Camillo Carobbio, Frank Rikki Mauritz Canevari, Leonardo De Mattos, Giorgio Peretti

03:48 **D.I.E.P. Sizer: a new cad cam method for d.I.E.P. Modeling**

Federico Giorgini, Chiara Gelati, Valentina Pinto, Maria Elisa Lozano Miralles, Luca Contu, Paolo G. Morselli, Riccardo Cipriani

03:55 **Development of a 3-dof impedance-type manipulator for cooperative surgical port alignment during microsurgery**

Jonas Smits, y Gijbels, Dominiek Reynaerts, Emmanuel Vander Poorten

04:02 **Mems varifocal mirror for high-power laser focusing in endoscopic laser surgery**

A.A. Geraldès, P. Fiorini, L.S. Mattos

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

THURSDAY 21ST MARCH

Ponte A Room

09:30 a.m. **Transplantation**
11:30 a.m.

2 crediti ECM

11:30 a.m. Coffee Break

11:30 a.m. **Haemostatics**
01:30 p.m.

2 crediti ECM

01:30 p.m. Break

02:30 p.m. **Imaging**
04:30 p.m.

2 crediti ECM

THURSDAY 21ST MARCH

PONTE A ROOM

09.30 a.m. - 11.30 a.m.

Transplantation

President: G.M. Ettorre (Roma)

Chairmen: B. Davies (UK), F. Melandro (Roma), R. Meniconi (Roma)

Lecture: donation after cardiocirculatory death in Italy. Meet the expert of the liver transplantation

09:30 L. De Carlis (Milano)

MINIMALLY INVASIVE SURGERY AND TRANSPLANTATION

Laparoscopic Training in Transplant Surgery

09:45 C. Silvestre (Padova)

09:52 Experts: I. Fontana (Genova), N. Guglielmo (Roma)

Robotic training in transplant surgery

09:58 S. Di Sandro (Milano)

10:05 Expert: I. Scalera (Napoli)

MACHINE PERFUSION IN LIVER TRANSPLANTATION

Cool it down why I choose hypothermic perfusion

10:08 D. Patrono (Torino)

10:15 Expert: Q. Lai (Roma)

Keep it warm why I prefer normothermia

10:18 D. Ghinolfi (Pisa)

10:25 Expert: R. De Carlis (Milano)

Bio-engineering in transplantation. 3d-scaffold 3d and and decellularized organs

10:28 S. Novelli (CH)

10:35 Expert: G. Spoletini (Roma)

COMPUTER ASSISTED GRAFT ASSESSMENT

Robotic system for stem cells delivery

10:38 C. Bergeles (UK)

Liver graft steatosis assessment based on smartphone pictures

10:48 L. De Mattos (Genova)

SELECTED ABSTRACT

10:55 Assessment of respiratory muscles function after lung transplantation. A multidisciplinary integrated approach

Valeria Musso, Antonella Lo Mauro, Maurizio Vergari, Emilia Privitera, Ilaria Righi, Paolo Mendogni, Manuela Sgroia, Alessandra Mazzucco, Alessandro Palleschi

11:02 Role of perfusion machine in marginal liver transplantation: our experience and review of the literature

Fabio Pio Curci, Quirino Lai, Fabio Melandro, Zoe Larghi Laureiro, Redan Hassan, Anna Di Tomaso, Beatrice Biffoni, Sara Sánchez Sumozas, Gianluca Mennini, Massimo Rossi

11:09 Noninvasive assessment of liver steatosis in deceased donors using learning-based texture analysis

Manuela Cesaretti, Ilaria Patrini, Michela Ruperti, Elena De Momi, Sara Moccia, Olivier Soubrane

THURSDAY 21ST MARCH

PONTE A ROOM

11.30 a.m. – 01.30 p.m.

Haemostatics

President: A. Imperatori (Varese)

Chairmen: M. Amisano (Casale Monferrato), A. Nasti (Matera)

Panelists: A. Benevento (Gallarate), M. De Fazio (Napoli) R. Galleano (Pietra Ligure),
A. Gattolin (Mondovi), G. Pernazza (Roma)

Lecture: Haemostatics in surgery what do we have available?

11:30 L. Oragano (Domodossola)

VIDEOS: HAEMOSTATICS "AT WORK"

... in the prevention of air loss after thoracic surgery

11:40 P. Mendogni (Milano)

11:47 Expert: A. Alloisio (Genova)

... in thoracic-abdominal aortic surgery

11:50 N. Montelione (Roma)

11:57 Expert: G. Mariscalco (Genova)

... in peripheral vascular surgery

12:01 G. Galzerano (Siena)

12:07 Expert: C. Ferrero (Genova)

... in the reinforcement of intestinal anastomoses

12:10 D. Rega (Napoli)

12:17 Expert: E. Coccozza (Varese)

... in hepatic resections

12:20 F. Ratti (Milano)

12:27 Expert: D. Cavaliere (Forli)

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

... in transplant surgery

12:30 F. Melandro (Roma)

12:37 Expert: G.M. Ettore (Roma)

... in pancreatic resection

12:40 R. Meniconi (Roma)

12:47 Expert: M. Falconi (Milano)

SELECTED ABSTRACT

12:50 **Splenomegalies in hematologic diseases. Totally laparoscopic splenectomies**

Giulia Tarantino, Domenico Spoletini, Giuseppe Lamacchia, Massimo Carlini

12:57 **Fibrin sealant patch application for preserving the ovarian reserve during laparoscopic ovarian cystectomy**

Fabio Barra, Chiara Bondi, Nadia Cusini, Simone Ferrero

01:04 **Mini-invasive surgical treatment of hemomediastinum and hemotorax as complications after internal jugular vein catheterization**

Margherita Cattaneo, Francesco Damarco, Alessandra Mazzucco, Valeria Musso, Sara Pieropan, Paolo Mendogni, Ilaria Righi, Mario Nosotti

THURSDAY 21ST MARCH

PONTE A ROOM

02.30 p.m. – 04.30 p.m.

Imaging

Presidents: G. Palazzini (Roma)

Chairmen: R. Patini (Roma), P. Sirignano (Roma)

Panelists: B. Amato (Napoli), M. Casaccia (Genova), V. Penza (Genova), M. Pera (Genova),
F. Santini (Genova)

IMAGING OF THE PRESENT

Do we know what we use?

02:30

S. Guerrini (Grosseto)

02:37

Expert: G. Minetti (Genova)

HYBRID PROCEDURE

Needs and request

02:40

E. Gallitto (Bologna)

Radiologist point of view

02:47

G. Bovio (Genova)

Image Enhancement Technologies study of superficial vascularization

02:54

A. Laborai (Genova).

3D dynamic view for advanced dental implant

03:01

G. Pellegrino (Bologna)

Cromo-endoscopy and augmented endoscopy

03:08

R. Maselli (Rozzano)

Fluoroscopic bronchoscopy for early diagnosis of lung tumour

03:15

R. Quercia (Bari)

IMAGING IN THE FUTURE

Surgical vision

03:22 F. Vasconcelos (UK)

Surgical data science

03:29 S. Moccia (Ancona)

SELECTED ABSTRACT

03:36 Usefulness of structured mri report templates proposed by the european society of gastrointestinal and abdominal radiology in t and n staging of rectal cancer

Niccolò Furbetta, Rosa Cervelli, Piero Boraschi, Francescamaria Donati, Gregorio Di Franco, Matteo Palmeri, Simone Guadagni, Desirée Gianardi, Matteo Bianchini, Davide Caramella, Luca Morelli

03:43 Robotic control of all-optical ultrasound imaging

G. Dwyer, E.J. Alles, R.J. Colchester, E. Maneas, S. Ourselin, T. Vercauteren, J. Deprest, E. Vander Poorten, P. De Coppi, A.E. Desjardins, D. Stoyanov

03:49 A position-based framework for the prediction of probe-induced lesion displacement in ultrasound-guided breast biopsy

E. Tagliabue, D. Dall'Alba, E. Magnabosco, C. Tenga, P. Fiorini

03:56 Three-dimensional (3d) - printed models in liver surgery: a new thecnology for surgical planning

Zoe Larghi Laureiro, Simone Novelli, Fabio Melandro, Redan Hassan, Fabio Pio Curci, Anna Di Tomaso, Federico Marrocco, Quirino Lai, Gianluca Mennini, Massimo Rossi

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

THURSDAY 21ST MARCH

Roma / Doria Room

11:30 a.m. **Regeneration** **1,4 crediti ECM**
01:30 p.m.

01:30 p.m. Break

02:30 p.m. **Encouraging Young Nurses** **2 crediti ECM**
04:30 p.m.

04:30 p.m. **Encouraging Young Nurses** **2 crediti ECM**
06:00 p.m.

THURSDAY 21ST MARCH

ROMA / DORIA ROOM

11.30 a.m. – 01.30 p.m.

Regeneration

President: P.L. Santi (Genova)

Chairman: L. Rosato (Piacenza)

Panelists: A. Macciò (Savona)

Lecture: the new regenerative surgery

11:30 M. Scala (Genova)

MEDICINE AND REGENERATIVE SURGERY IN ORTHOPEDIC SURGERY

Autologous fat graft as a treatment for Knees' arthrosis and new possibilities under the Italian and European law

11:40 M. Stabile (Piacenza)

MEDICINE AND REGENERATIVE SURGERY IN VASCULAR SURGERY

Tissue regeneration with fat graft in critic limb ischemia

11:47 A. Settembrini (Milano)

New strategies for venous ulcers and diabetic foot

11:54 L. Gazzabin (Firenze)

Conservative treatment in diabetic foot

12:01 P. Marannino (Bari)

MEDICINE AND REGENERATIVE SURGERY IN GYNECOLOGY SURGERY

The role in vulvar reconstruction multidisciplinary approach in the treatment of vulvar lichen sclerosus

12:08 I. Baldelli (Genova)

MEDICINE AND REGENERATIVE SURGERY IN BREAST RECONSTRUCTION

Use of homologous acellular dermal matrix for breast reconstruction

12:15 E. Ponte (Genova)

Innovative tissue engineering strategies to enhance the vascularization of ischemic tissues

12:22 C. Stocco (Trieste)

How to regenerate the skin after radiation therapy

12:29 V. Quercia (Roma)

Fat graft a brand new pain killer

12:36 A. Castagna (Milano)

Breast reconstruction from the past to the future

12:43 P. Parisi (Milano)

SELECTED ABSTRACT

12:50 Treatment of finger degloving injury with acellular dermal matrix: functional and aesthetic results

Paolo Claudio Marannino, Michele Maruccia, Rossella Elia, Giuseppe Giudice

THURSDAY 21ST MARCH

ROMA / DORIA ROOM

02.30 p.m. – 06.00 p.m.

Encouraging Young Nurses

Presidents: B. Cavaliere (Genova), M. Rizzuto (Udine)

Panelists: A. Biasotti (Genova), S. Ferrigno (Genova)

Intro

02:30 D. Pertile (Genova), E. Romairone (Genova)

PATIENT AND HIS MANAGEMENT IN ROBOTIC SURGERY

The proper pathway

02:35 A. Castrignanò (Genova), D. Latorre (Genova)

Management of the patient

02:50 K. di Somma (Genova)

Recovery aspects

03:00 C. Pieri (Genova)

The management of PICC lines

03:10 F. Aula (Genova), F. Ursino (Genova)

PATIENT MANAGEMENT AFTER ROBOTIC SURGERY

Surgical and parastomal site management

03:30 A. Gabriele (Genova)

Surgical site and peristomal protection

03:40 A. Ciardullo (Genova)

Design thinking web-app in ERAS

03:50 F. De Luca (Roma), M. Presutti (Roma)

USAGE OF ADVANCED DRESSING

Wound bed preparation

04:10 T. Cannavale (Genova), G. Nocco (Genova)

Advanced dressings

04:30 T. Cannavale (Genova), G. Nocco (Genova)

CLINICAL CASES

04:50 T. Cannavale (Genova), G. Nocco (Genova)

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

THURSDAY 21ST MARCH

Raffaello Room

09:30 a.m. **Laparoscopy Skills (course)**
11:30 a.m.

11:30 a.m. Coffee Break

11:30 a.m. **Laparoscopy Skills (course)**
01:30 p.m.

01:30 p.m. Break

02:30 p.m. **Cras/Spigc Communications III**
04:30 p.m.

THURSDAY 21ST MARCH

RAFFAELLO ROOM

09.30 a.m. - 01.30 p.m.

Laparoscopy Skills (Course)

Presidents: S. Bonilauri (Reggio Emilia), P. Capelli (Piacenza)

Tutors: A. Calarco (Roma), L. Conti (Piacenza), M. De Luca (Bari), G. Formisano (Grosseto),
G. Giraud (Cuneo), A. Iossa (Latina), A. Martino (Genova), S. Rausei (VA), L. Reggiani (SV),
C. Vallicelli (RN)

09:30 Introduction

Baseline Evaluation Test

Dry lab simulation

Final Evaluation Test

THURSDAY 21ST MARCH

RAFFAELLO ROOM

02.30 p.m. - 04.30 p.m.

Cras/Spigc Communications III

President: S. Bonilauri (Reggio Emilia)

Panelists: P.Cumbo (Orbassano), F. Galli (Varese), K. Althoefer (UK)

• **A comparison of expert and novice performance in obstetric ultrasound using probe tracking systems: data to improve training**

Brian P Dromey , Shahanaz Ahmed , Francisco Vasconcelos , Evangelos Mazomenos, Anna L David, Danail Stoyanov, Donald M Peebles

• **Endobronchial ultrasound-transbronchial needle aspiration diagnostic yield and accuracy: analysis of 563 consecutive cases**

Silvia De Maio, Maria Cattoni, Giorgio Crosta, Dino La Salvia, Elisa Nardecchia, Federica Vergani, Jessica Costa, Andrea Imperatori, Nicola Rotolo

• **A rare case of laryngeal swelling**

Daniela Traverso, Antonio Cavallero, Marco Giudice, Silvia Romeo, Roberta Lai, Stefania Russo

• **The road ahead for endoluminal intervention**

Edoardo Forcignanò, Mauro Verra, Alberto Arezzo, Simone Arolfo, Marco Bonino, Giacomo Lo Secco, Gastone Ciuti, Paolo Dario, Andrea Firrincelli, Federico Bianchi, Noemi Gabrielli, Francesco Falotico, Anastasios Koulaouzidis, Mario Morino

• **Low energy bipolar prostate enucleation with the modified “prostate lifter” sheath. an innovative technique to minimize energy side effects of endoscopic adenoma removal.**

Alessandro Calarco

• **QMR (Quantum Molecular Resonance) : a new tecnology for a cold cutting electronic scalpel**

Giusy Castiglione, Paolo Nordera

• **Total thyroidectomy for substernal goitre performed with advanced vessel sealing devices**

Ruggiero Dimonte, Lucia Iliaria Sgaramella, Giovanna Di Meo, Valentina Ferraro, Claudia De Giorgi, Maria Luisa Montanaro, Annamaria Spadone, Francesco Vittore, Giuseppe Massimiliano De Luca, Angela Gurrado, Mario Testini

• **Iatrogenic lesion of aberrant obturator artery in de garengot hernia. Case report**

Giuseppe Massimiliano De Luca, Nadia Viola, Alessandro Perrone, Antonella Tromba, Paola Palazzo, Anna Maschio, Alessandro De Luca, Simone Giungato, Azmi Aubed Zoubi

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

- **Sternal replacement with cryopreserved cadaveric allograft: a single center experience.**

Pia Ferrigno, Alice Bellini, Alessandro Pangoni, Elisa De Franceschi, Giovanni Comacchio, Andrea Dell'Amore, Marco Schiavon, Samuele Nicotra, Andrea Zuin, Federico Rea

- **Does indocyanine green fluorescence change the evaluation of vascularization during surgery? A pilot study**

Gianluca Marino, Lucia Casarella, Marina Coppola, Alessandra Di Giovanni, Marianna Rasile, Domenico Iuzzolino, Mario Malzoni Gianluca Marino, Lucia Casarella, Marina Coppola, Alessandra Di Giovanni, Marianna Rasile, Domenico Iuzzolino, Mario Malzoni

- **Surgical treatment of haemangioendothelioma of superior vena cava**

Denise Angioletti, Giovanna Rizzardi, Giovanni Guanella, Francesca Stocca, Paolo Giulio Panisi, Giuseppe Spina, Giuseppe Gramegna, Luigi Bortolotti

- **TATME: tailored approach to ultra-low rectal cancer**

Silvana Puglisi, Riccardo Danna, Federico Pipitone, Nicoletta Sveva, Andrea Muratore

- **Tricky and insidious management in isolated pancreatic trauma. A case report**

Andrea Romanzi, Caterina Caterina, Valentina Iori, Francesco Maria Carrano, Elia Zani, Matteo Annoni, Vincenzo Pappalardo, Giuseppe Letto, Lorenzo Latham, Gabriele Soldini, Giulio Carcano

- **A left inguinoscrotal hernia, containing the sigmoid colon and the left pelvic ureter in patient suffering from hypertrophic obstructive cardiomyopathy. case report. de garengot hernia. A case report**

Giuseppe Massimiliano De Luca, Nadia Viola, Paola Palazzo, Antonella Tromba, Alessandro Perrone, Anna Maschio, Alessandro De Luca, Simone Giungato, Giuseppe Di Lorenzo e Matteo Falcione Azmi Aubed Zoub

- **Depth prediction and implicit domain adaption for endoscopy using conditional generative adversarial networks**

A. Rau, P. J. Edwards, O. Ahmad, L. Lovat, D. Stoyanov

- **Surgical robotic platform for endoscopic dissection**

M. Brancadoro, C. Quaglia, H. Abidi, M. A. Bonino, A. Arezzo, A. Menciassi

- **Towards the development of a novel handheld robotic tool for the expanded endoscopic endonasal approach**

E Dimitrakakis, G Dwyer, HJ Marcus, NL Dorward, D Stoyanov

- **Sentisim: a hybrid training platform for slnb in local melanoma staging**

A. Hernansanz, T. Pieras, L. Ferriz, D. Moreno A. Casals

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

- **Four degrees of freedom soft manipulator module driven by tendons for minimally invasive surgery**

H Godaba, A Ataka, K Althoefer

- **Minimally invasive surgery eversion overtube**

F. Putzu, T. Abrar, J. Konstantinova, K. Althoefer

- **An artificial neural network differential pressure flow sensor to measure intra-aortic flow for reboa**

Alok Mehta, Akash Mehta, Diana Velazquez-Pimentel, Jack McAlinden, Samy Sadek, Kaspar Althoefer

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

THURSDAY 21ST MARCH

Leonardo Room

09:30 a.m. **Microsurgery (course)**
11:30 a.m.

11:30 a.m. Coffee Break

11:30 a.m.
01:30 p.m.



01:30 p.m. Break

02:30 p.m. **Cras/Spigc Communications IV**
04:30 p.m.

THURSDAY 21ST MARCH

LEONARDO ROOM

09.30 a.m. – 11:30 a.m.

Microsurgery (course)

President: M Maruccia (Bari)

Tutors: C. Campisi (Genova), S. Dessalvi (Genova), R. Elia (Bari), F. Lotorto (Roma),
M. Marcasciano (Roma), L. Troisi (Trieste)

09:30 **Techniques of vascular microsurgery**

R. Elia (Baria)

Needle driving at microscope

F. Lo Torto (Roma)

Practice on simulation systems

Final Evaluation Test

THURSDAY 21ST MARCH

LEONARDO ROOM

02.30 p.m. - 04.30 p.m.

Cras/Spigc Communications IV

President: M. Rigamonti (Milano)

Panelists: J. Dankelman (NL), M. Mascherini (Genova)

• **Total thyroidectomy vs completion thyroidectomy for thyroid nodules with indeterminate cytology/follicular proliferation. A single-centre experience.**

Giuseppe Sena, Gaetano Gallo, Nadia Innaro, Noemi Laquatra, Martina Tolone, Rosario Sacco, Giuseppe Sammarco

• **The prognostic value of kras and braf in stage i-iii colorectal cancers. A systematic review**

Giuseppe Sena, Gaetano Gallo, Giuseppina Vescio, Rosario Sacco, Mario Trompetto, Giuseppe Sammarco

• **Venous mesenteric ischaemia: case report and literature review**

Nicoletta Sveva Pipitone Federico, Riccardo Danna, Bruno Cuzzola, Andrea Muratore

• **Single anastomosis duodeno-ileal bypass with/after sleeve gastrectomy: initial experience of a high-volume single institution**

Pierpaolo Gallucci, Luca Sessa, Francesco Pennestrì, Piero Giustacchini, Luigi Ciccoritti, Cristina Modesti, Rocco Bellantone, Marco Raffaelli

• **Sigmoid volvulus in dolichocolon :case report and review of literature**

Bruno Cuzzola, Nicoletta Sveva Pipitone Federico, Andrea Muratore

• **A particular modification of weber- ferguson approach**

Sara Negrello, Alexandre Anesi, Luigi Chiarini

• **Pluriannual experience of a thoracic oncology multidisciplinary group**

Denise Angioletti, Giovanna Rizzardi, Giovanni Guanella, Giuseppe Chiesa, Andrea Ravasio, Maria Bonomi, Gianluigi Ciocia, Silvia Consonni, Luigi Bortolotti

• **A tertiary care center analysis of pancreatic surgery in elderly with particular view on patients with higher american society of anesthesiologists' risk score**

Gregorio Di Franco, Desirée Gianardi, Niccolò Furbetta, Matteo Palmeri, Simone Guadagni, Matteo Bianchini, Gianni Stefanini, Cristiano D'Isidoro, Giovanni Caprili, Giulio Di Candio, Franco Mosca, Luca Morelli

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

- **The immunohistochemical score of cdx2, ck7 and ck 20 can identify pathological subtypes of ampullary adenocarcinomas and their prognosis**

Matteo Palmeri, Niccola Funel, Luca Emanuele Pollina, Niccolò Furbetta, Gregorio Di Franco, Simone Guadagni, Desirée Gianardi, Matteo Bianchini, Enrico Vasile, Alfredo Falcone, Giulio Di Candio, Marco Del Chiaro, Luca Morelli

- **Radiofrequency procedure (secca®) for fecal incontinence: one-year experience**

Paola Batistotti, Marco Frascio, Francesca Mandolino, Emanuela Stratta, Giulia Atzori, Alba Oliva, Sara Capoccia Giovannini, Raffaele De Rosa, Franco De Cian

- **Complications in thyroid surgery: our experience**

Davide Inversini, Matteo Annoni, Alessia Palluotto, Vincenzo Pappalardo, Giuseppe Ietto, Gabriele Soldini, Andrea Leotta, Giulio Carcano

- **Elective surgery of ulcerative colitis. The role of ileo-rectal anastomosis**

Giulia Atzori, Emanuela Stratta, Oliva Alba, Batistotti Paola, De Rosa Raffaele, Rosario Fornaro

- **Esophageal cuniculatum carcinoma as an uncommon indication for total esophagectomy: case series and systematic review**

Matteo Castrovillari, Adriano Consolo, Francesco Giovanardi, Manuela Garofalo, Gabriela Aracelly, Arroyo Murillo, Mariarosa Scordamaglia, Pasquale Campagna, Giulia Munzi, Fabio Melandro, Federico Francioni, Pasquale Bartolomeo Berloco, Quirino Lai

- **Tailor-made day surgery for frail patient**

Annalisa Corrado, Marino Nardi, Adriana Mazzocchetti, Alessandro Bennato, Massimo Basti, Enzo Monteferrante

- **Management of broncho-pleural fistulas: single center experience**

Rossella Potenza, Marco Andolfi, Alberto Matricardi, Valeria Berti, Alberto Italiani, Lavinia Gatteschi, Francesco Puma

- **Emergency surgery in the management of severe acute colitis**

Raffaele Vincenzo De Rosa, Emanuela Stratta, Giulia Atzori, Alba Oliva, Paola Batistotti, Sara Capoccia Giovannini, Rosario Fornaro

- **Incidence and management of pregnancy-related breast cancer**

Luca Seriau, Roberta Di Vora, Serena Bertozzi, Michela Andretta, Barbara Baita, Ambrogio Pietro Londero, Carla Cedolini

- **A deep-learning strategy for informative-frame selection and early-stage cancer diagnosis in laryngoscopic videos**

I. Patrini, M. Ruperti, E. De Momi, L. Mattos, E. Frontoni, S. Moccia

- **Residual networks for inter-foetus membrane segmentation in fetoscopy**

A. Casella,, D. Paladini, E. De Momi, L. S. Mattos, S. Moccia

• **Cbct reconstruction based on arbitrary trajectories using tigre software tool**

S. Hatamikia,, A. Biguri, G. Kronreif , J. Kettenbach, W. Birkfellner

• **Xgboost implementation to assist thoracic surgeons in early detection of operative risks**

L. Migliorelli , S. Moccia, E. Frontoni

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

THURSDAY 21ST MARCH

Michelangelo Room

11:30 a.m. Cras/Spigc Communications I
01:30 p.m.

01:30 p.m. Break

02:30 p.m. Cras/Spigc Communications II
04:30 p.m.

THURSDAY 21ST MARCH

MICHELANGELO ROOM

11.30 a.m. - 01.30 p.m.

Cras/Spigc Communications I

President: E. Grant (USA)

Panelists: M. Confalonieri (Lecco), L. Conti (Piacenza), L. Zollo (Roma)

• **Vrviz: native vr visualization of ros topics**

J. O'Neill, S. Ourselin, T. Vercauteren, L. da Cruz, C. Bergeles

• **The routine administration of somatostatin after pancreatoduodenectomy: is it still justified? A case-matched comparison based on fistula risk score, asa score and surgical technique**

Matteo Palmeri, Niccolò Furbetta, Desirée Gianardi, Simone Guadagni, Gregorio Di Franco, Matteo Bianchini, Cristiano D'Isidoro, Giovanni Caprili, Giulio Di Candio, Franco Mosca, Luca Morelli

• **Erabs: early experience**

Vincenza Paola Dinuzzi, Umberto Rivolta, Elisa Maria Elena Arborio, Giuliano Sarro

• **Kinesiology taping after video-assisted thoracoscopic lobectomy for lung cancer: preliminary results of a randomized case-control**

Federica Vergani, Maria Cattoni, Laura Gasperini, Jessica Borrelli, Silvia De Maio, Jessica Costa, Massimo Castiglioni, Nicola Rotolo, Annamaria Grande, Andrea Imperatori

• **A novel device for condyle stabilisation in orthognathic surgery: preliminary reports and evaluation of results**

Alessandro Tel, Fabio Costa, Salvatore Sembronio, Massimo Robiony

• **Chronic breast pain after breast cancer surgery**

Luca Seriau, Roberta Di Vora, Serena Bertozzi, Michela Andretta, Barbara Baita, Ambrogio Pietro Londero, Carla Cedolini

• **Enhanced recovery pathways after major lung resection: a single centre experience**

Giulia Pacella, Nicoletta Pia Ardò, Domenico Loizzi, Fabio Nicola Fatone, Michele Piazzolla, Francesco Sollitto

• **Recurrent laryngeal nerve injury after lung surgery: a retrospective review**

Elena Prisciandaro, Niccolò Filippi, Francesco Petrella, Lorenzo Spaggiari

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

- **Implementation of an early recovery pathway**

Michele Benedetti; Paolo Ciano, Gianluca Guercioni, Vittorio Bartolotta, Fabio Marilungo, Simone Cicconi, Irene Marziali, Marco Catarci

- **Multicenter randomized controlled trial for comparison of digital and traditional chest drain in a vats pulmonary lobectomy cohort: interim analysis**

Sara Pieropan, Paolo Mendogni, Giuseppe Marulli, Giovanni Comacchio, Luigi Gaetano Andriolo, Giovanna Imbriglio, Gianluca Bonitta, Davide Tosi, Camillo Lopez, Federico Rea, Mario Nosotti

- **Early red flags associated with delayed discharge in patients submitted to gastrectomy: analysis of perioperative variables and eras protocol items.**

Raffaele Cerchione, Marco Palucci, Lorenzo Cinelli, Andrea Cossu, Francesco Puccetti, Paolo Parise, Riccardo Rosati

- **Enhanced recovery after surgery in colorectal surgery: identification of predictive variables of failure in a monocentric series on 733 patients**

Giovanni Guarneri, Ugo Elmore, Valentino de Ruvo, Francesca Aleotti, Andrea Vignali, Riccardo Rosati Giovanni Guarneri, Ugo Elmore, Valentino De Ruvo, Francesca Aleotti, Andrea Vignali, Riccardo Rosati

- **D3 node dissection for colon cancer**

Nicoletta Sveva Pipitone Federico, Antonio La Terra, Andrea Muratore

- **Synchronous adenocarcinoma-rectal and hepatic flexure: clinical options**

Nicoletta Sveva Pipitone Federico, Andrea Muratore

- **Intrahepatic cholangiocarcinoma as the new field of implementation of laparoscopic liver resection programs. A comparative propensity score based analysis of open and laparoscopic liver resections**

Francesca Ratti, Arab Rawashdeh, Federica Cipriani, John Primrose, Guido Fiorentini, Mohammed Abu Hilal, Luca Aldrighetti

- **Appraisal of disease-specific benefits of minimally invasiveness in surgery of breast cancer liver metastases**

Francesca Ratti, Matteo Serenari, Matteo Zanello, Enrico Prosperi, Federica Cipriani, Giorgio Ercolani, Elio Jovine, Matteo Cescon, Luca Aldrighetti

- **Reappraisal of the advantages of laparoscopic liver resection for hepatocellular carcinoma stratified per bclc criteria: a propensity score based analysis to assess the differential perioperative benefit**

Francesca Ratti, Federica Cipriani, Guido Fiorentini, Marco Catena, Michele Paganelli, Luca Aldrighetti

- **Effects of “on-principle pringle maneuver” versus “on-principle non-pringle maneuver” in laparoscopic liver resections a comparative analysis between two european tertiary referral centers**

Francesca Ratti

- **Minimally invasive treatment of large esophageal leiomyoma**

Ludovica Baldari, Andrea Spota, Maura De Francesco, Silvia Petrucci, Michele Ballabio, Elisa Cassinotti, Luigi Boni

- **Large para-esophageal hiatal hernias: short-term results for robotic repair with gore bio-a®**

Angela Romano, Graziano Ceccarelli

- **Modeling and design of an active assistive exoskeletal robot for upper limb rehabilitation**

Vishal Ramadoss, Dimiter Zlatanov, Matteo Zoppi

- **Momentum-based collision detection algorithm for a biphasic media variable stiffness actuator**

J.H. Lugo, M. Zoppi, R. Molfino

THURSDAY 21ST MARCH

MICHELANGELO ROOM

02.30 p.m. - 04.30 p.m.

Cras/Spigc Communications II

President: I. Georgilas (UK)

Panelists: G. Dagnino (UK), O. Iorio (Latina)

- **Barbed vs conventional sutures in bariatric surgery: a propensity score analysis from a high volume center**

Francesca. Prioli, Francesco Pennestri, Pierpaolo Gallucci, Piero Giustacchini, Luigi Ciccoritti, Luca Sessa, Paola Aceto, Rocco Bellantone, Marco Raffaelli

- **Complete mesocolic excision for right colon cancer**

Simona Macina, Michele Ballabio, Ludovica Baldari, Andrea Spota, Maura De Francesco, Elisa Cassinotti, Massimiliano Della Porta, Luigi Boni

- **Laparoscopic “en-bloc” resection of splenic flexure, greater curvature of the stomach, tail of the pancreas and spleen for t4 colonic cancer**

Andrea Spota, Ludovica Baldari, Michele Ballabio, Maura De Francesco, Simona Macina, Elisa Cassinotti, Luigi Boni

- **Laparoscopic “double-port” splenectomy. A new minimally-invasive option in a giant spleen**

Sara Capoccia Giovannini, Marco Casaccia, Marco Frascio, Rosario Fornaro, Cesare Stabilini, Emanuela Stratta, Giulia Atzori, Alba Oliva, Paola Batistotti, Raffaele De Rosa, Franco De Cian

- **Laparoscopic single-port versus traditional multi-port laparoscopic cholecystectomy. A comparative study on clinical outcomes and costs**

Paola Batistotti, Marco Casaccia, Marco Frascio, Rosario Fornaro, Cesare Stabilini, Emanuela Stratta, Giulia Atzori, Alba Oliva, Sara Capoccia Giovannini, Raffaele De Rosa

- **Colonic splenic flexure resection and distal splenopancreatectomy**

Marcello Calabrò, Letizia Spidalieri, Andrea Muratore

- **Transthoracic hepatic resection of viii segment: a video case**

Federica Falaschi, Francesco Mallozzi S.Maria, Chiara Amatucci, Silvia Cardella, Rosa Marcellinaro, Andrea Laurenzi, Nicola Guglielmo, Roberto Luca Meniconi, Marco Colasanti, Giuseppe Maria Ettore

- **Laparoscopic distal pancreatectomy and resection of retro-pancreatic splenic artery aneurysm: preserving the spleen**
Luigi Conti, Gaetano Cattaneo, Gabriele Regina, Gerardo Palmieri, Flavio Cesare Bodini, Patrizio Capelli
- **Subxyphoid vats atypical lung resection, first results**
Michele Piazzolla, Nicoletta Pia Ardò, Domenico Loizzi, Fabio Nicola Fatone, Francesco Sollitto
- **Laparoscopic palliative gastrectomy for gastric cancer symptoms. Short-term outcomes and survival**
Marco Giordano, Nicola Zanini, Giuseppe Novelli, Matteo Montesi, Basilio Pirrera, Vincenzo Alagna, Carlo Vallicelli, Gianluca Garulli
- **Advanced age should not be a contraindication for laparoscopic gastrectomy in western patients**
Marco Giordano, Nicola Zanini, Carlo Vallicelli, Basilio Pirrera, Vincenzo Alagna, Giuseppe Novelli, Matteo Montesi, Gianluca Garulli
- **Bowel obstruction caused by a cecal volvulus treated with laparoscopic derotation**
Tommaso Cipolat, Mariacristina Cartillone, Elena Falsetti, Antonio d'Alessandro, Elie Chouillard
- **Laparoscopic hyperthermic isolated limb perfusion: a new minimally invasive approach for hila**
Nicola Solari, Matteo Mascherini, Simona Reina, Francesco Sucameli, Franco De Cian, Ferdinando Cafiero
- **Loco-regional analgesia vs general anesthesia for surgical lung biopsies in patients with suspected interstitial lung disease. A single center prospective study**
Francesco Guerrera, Paraskevas Lyberis, Edoardo Ceraolo, Giulio Rosboch, Gerardo Cortese, Paolo Olivo Lausi, Pier Luigi L Filosso, Luca Brazzi, Enrico Ruffini
- **Minimally invasive surgical approaches for the treatment of non-thymomatous myasthenia gravis**
Erika Passone, Francesco Guerrera, Federico Femia, Martina Gallo, Pier Luigi Filosso, Claudio Mossetti, Paolo Olivo Lausi, Stephane Renaud, Nicola Santelmo, Gilbert Massard, Enrico Ruffini
- **Laparoscopic approach for rectal cancer in elderly patients**
Aldo Rocca, Roberto Pezzuto, Daniela Rega, Ugo Pace, Cinzia Sassaroli, Paolo Delrio
- **Is full thickness excision in tamis without defect suture safe?**
Roberto Pezzuto, Aldo Rocca, Andrea Fares Bucci, Daniela Rega, Dario Scala, Paolo Delrio
- **Vision-based virtual fixtures generation for mirs dissection tasks**
R. Moccia, M. Selvaggio, B. Siciliano, A. Arezzo, F. Ficuciello
- **Robust laparoscope body calibration using hand-eye calibration methods**
Chinmay Samant, Adlane Habed, Michel de Mathelin

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

THURSDAY 21ST MARCH

Elettra Room

11:30 a.m. **Abdominal Wall (course)**
01:30 p.m.

THURSDAY 21ST MARCH

ELETTRA ROOM

11.30 a.m. - 01.30 p.m.

Abdominal Wall (course)

Tutors: E. Botteri (Montichiari), U. Bracale (Napoli), G. Cavallaro (Roma), C. Stabilini (Genova),
N. Vettoretto (Montichiari)

11:30 Surgery of inguinal hernia

Anatomy

Open techniques

Laparoscopic techniques

Guidelines

Surgery of incisional hernia

Prevention

Open and laparoscopic surgery: the state of art

Materials

Open surgery: what's news

Minimally invasive surgery: laparoscopic and robotic

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

FRIDAY 22ND MARCH

Plenary Room

08:30 a.m. **Minimal invasive surgery** **1,4 crediti ECM**
10:30 a.m.

10:30 a.m. Coffee Break

10:30 a.m. **Encouraging Education for New generations** **1,5 crediti ECM**
12:30 p.m.

01:00 p.m. Break

02:30 p.m. **Trauma** **1,4 crediti ECM**
04:30 p.m.

04:30 p.m. **Low Cost Technology**
06:00 p.m.

06:00 p.m. **Closing Remarks**
07:00 p.m.

FRIDAY 22ND MARCH

PLENARY ROOM

08.30 a.m. - 10.30 a.m.

Minimal invasive surgery

Presidents: F. Corcione (Napoli), M. Montorsi (Milano)

Chairmen: G. Cavallaro (Roma), P. Mendogni (Milano)

Panelists: M. Basti (Pescara), A. Biondi (Catania), C. Gustavino (Genova), B. Herman (BE),
A. Muratore (Pinerolo)

FACE TO FACE

Rectal Cancer

Why MIS ... and why not

08:30 C. Coco (Roma), E. Leo (Milano)

VIDEO SESSION

Esophagus surgery MIS vs hybrid vs open

08:50 S. Di Domenico (Genova), M. Vecchiato (Udine)

08:58 Expert: U. Elmore (Milano)

Lung surgery uni-port vs tri-port VATS

09:03 M. Andolfi (Ancona), M. Ghisalberti (Siena)

09:17 Expert: G. Muriana (Mantova)

Colo-rectal surgery TATME vs RAR

09:22 G. Gallo (Catanzaro), P. Marsanic (Pinerolo)

09:36 Expert: M. Morino (Torino)

Radical hysterectomy for cervical cancer MIS vs open

09:41 N. Bizzarri (Roma), G. Roviglione (Negrar)

09:55 Expert: S. Ferrero (Genova)

Innovative robotic system in MIS

10:00 P. Poignet (F)

Innovation in MIS: overcome technique to reproduce the tradition

10:07

T. Horeman (NL)

SELECTED ABSTRACT

10:14

Combined force- and pose sensing to characterize vaginal wall stiffness during laparoscopic sacrocolpopexy

J. De Smet, J. Deprest, E. Vander Poorten

10:21

Intra-operative navigation in minimally invasive surgery: accuracy assessment of the tracking performance of a surgical pointer

M. Aricò, G. Morel

FRIDAY 22ND MARCH

PLENARY ROOM

10.30 a.m. – 12.30 a.m.

Encouraging education for new generations

INTRO

D. Pertile (Genova)

Mandatory HTA

10:30 A. Crucitti (Roma)

New perspectives in surgical education

10:40 A. Ferrero (Torino)

NEW IDEAS

Academic perspective for a young surgeon

10:50 M. Rossi (Roma)

Videos Teaching

11:00 L. Aldrighetti (Milano)

e-learning

11:10 W. Petz (Milano)

Beyond the surgery: non technical skill

11:20 R. Cirocchi (Roma)

11:30 TALK SHOW

Chairmen: S. Rausei (Varese), D. Soriero (Genova)

Panelists: E. Cigna (Pisa), P. De Paolis (Torino), M. Frascio (Genova), P. Marini (Roma), C. Martinelli (Bologna), R. Meniconi (Roma), M. Minerva (Milano), M. Testini (Bari), G. Torzilli (Milano), M. Tuzi (Roma)

FRIDAY 22ND MARCH

PLENARY ROOM

02.30 p.m. – 04.30 p.m.

Trauma

President: R. Faccincani (Milano)

Chairmen: B. Di Venere (Matera), L. Monteleone (Gallarate)

Panelists: B. Davies (UK), P. Moscatelli (Genova)

Lecture: the "trauma surgeon"

02:30 O. Chiara (Milano)

Mobile ECMO

02:45 L. Massobrio (Genova)

Pre-hospital management of vertebral trauma what's new?

02:52 G. Abregal (Imperia)

ROUND TABLE HYBRID-ER ROOM AND RAPTOR TRAUMA MANAGEMENT

E.R.

02:59 P. Cremonesi (Genova)

Surgeon

03:06 L. Berardi (Genova)

Anesthetist

03:13 M. Messina (Genova)

Interventional radiologist

03:20 U. Rossi (Genova)

REBOA, TEG & ROTEM in massive haemorrhage

03:27 S. Di Saverio (Bologna)

Laparoscopy in penetrating trauma

03:34 A. Birindelli (Bologna)

03:41 **Technologies for improvement of accuracy and speed in trauma surgery**
I. Georgilas (Bath)

03:51 **Computer and robotic assistance in orthopaedics and trauma surgery**
G. Dagnino (UK)

04:01 **TAKE HOME MESSAGES**
O. Chiara (Milano)

SELECTED ABSTRACT

04:06 **Predictive factors of massive transfusion in major trauma: perspective and international benchmarking studies**
Sara Giulia Cornero, Stefania Cimbanassi, Rolf Lefering, Marc Maegele, Osvaldo Chiara

04:13 **Hollow viscus and mesenteric injury in trauma / role of ct and diagnostic-therapeutic algorithm**
Alessandro Bonomi, Osvaldo Chiara, Stefania Cimbanassi, Stefano Granieri, Michele Altomare, Stefano Cioffi

FRIDAY 22ND MARCH

PLENARY ROOM

04.30 p.m. – 06.30 p.m.

Low cost Technology

President: M. Zago (Bergamo)

Chairmen: A. De Palma (Bari), F. Di Gennaro (Bari)

Panelists: G. Ciuti (Pisa), A. Orlando (UK)

Being a patient in Africa

04:30 E. Guaitoli (Brindisi) interview D. Cantone (Catania)

Global access to surgical care a big issue

04:50 J. Dankelman (NL)

Low-cost technologies in surgery in low-resource settings: state of art

04:57 R. Santoni (Genova)

CHALLENGES IN LIMITED RESOURCES CONTEXTS EXPERIENCE FROM THE FIELD

Low cost-radiology

05:04 M. Matteoli (Roma)

Low cost-orthopedy

05:11 S. Pelle (Roma)

Low cost-general surgery

05:18 M. Nardi (Roma)

Integrated care learning and training between high-income and low and middle-income country for surgery health systems

05:25 G. Manca (Brindisi)

Novel Sensing Technology for Real-Time Tissue Characterization

05:32 Z. Cheng (Genova)

SELECTED ABSTRACT

05:39 Low cost procto trainer

D. Passannanti, D. Telesco, F. Gaj

05:46 Drowsiness detection among surgeons: development of a wearable eeg device

T. Banfi, A. Cignoni, G. Ciuti

05:53 Custom made app for smartphones opens up new possibilities for surgical hand trauma management

Juste Kaciulyte, Luigi Losco, Federico Lo Torto, Nicola Felici, Diego Ribuffo, Emanuele Cigna

FRIDAY 22ND MARCH

Ponte B e Ponte C Room

08:30 a.m. **Endoscopy the surgery's future?**
10:30 a.m.

1,4 crediti ECM

10:30 a.m. Coffee Break

10:30 a.m.
12:30 p.m.



01:00 p.m. Break

02:30 p.m. **High Energy Surgical Devices**
04:30 p.m.

1,4 crediti ECM

FRIDAY 22ND MARCH

PONTE B E PONTE C ROOM

08.30 a.m. - 10.30 a.m.

Endoscopy the surgery's future?

President: M.C. Parodi (Genova)

Chairmen: G. Fanello (Roma), G. Galloro (Napoli)

Panelists: C. Bergeles (UK), S. Di Palo (Sanremo), P. Granone (Roma), F. Mattiuz (Genova)

Lecture: evolution of endoscopic colo-rectal cancer treatment

08:30 A. Arezzo (Torino)

TransOral endoscopic Ultrasonic Surgery TOUSS an alternative at robotic surgery?

08:40 A. V. Marcuzzo (Trieste)

08:47 Expert: G.L. Dionigi (Messina)

Radiofrequency ablation of biliary tract tumours

08:50 P. Antypas (Roma)

The surgeon perspective

08:57 M. Filauro (Genova), A. Zerbi (Milano)

Treatment of bariatric surgery complications

09:03 F. Cereatti (Cremona)

The surgeon perspective

09:10 G. Sarro (Magenta)

Endoscopic full thickness resections

09:17 G. Andrisani (Roma)

The surgeon perspective

09:23 A. Brescia (Roma), M. Catarci (Ascoli)

Digital technology and view enhancement in endo-urology

09:29 A. Calarco (Roma)

09:36 Expert: P. Traverso (Genova)

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

Airways Stenting

09:39

G. Pacella (Bari)

09:46

Expert: M. Salio (Genova)

Stiffness controlled robotic endoscopes enabling technologies for future flexible surgical systems

09:49

K. Althoefer (UK)

Fantastic voyage today Miniature robotic capsules for diagnosis and surgical treatment

09:56

G. Ciuti (Pisa)

SELECTED ABSTRACT

10:03

Transferring automatic polyp detection to the clinical domain

P. Brandao, O.F. Ahmad, E. Mazomenos, L.B. Lovat, D. Stoyanov

10:10

Shared control of an automatically aligning endoscopic instrument based on convolutional neural networks

A. Ahmad, C. Gruijthuijsen, M. Ourak, J. Deprest, T. Vercauteren, S. Ourselin, E. Vander Poorten

10:17

The road ahead for endoluminal intervention

Edoardo Forcignanò, Mauro Verra, Alberto Arezzo, Simone Arolfo, Marco Bonino, Giacomo Lo Secco, Gastone Ciuti, Paolo Dario, Andrea Firrincelli, Federico Bianchi, Noemi Gabrielli, Francesco Falotico, Anastasios Koulaouzidis, Mario Morino

FRIDAY 22ND MARCH

PONTE B E PONTE C ROOM

02.30 p.m. – 04.30 p.m.

High energy surgical devices

Presidents: E. De Toma (Roma), R. Rosati (Milano)

Chairmen: N. Deshpande (Genova), A. Gurrado (Bari), F. Ratti (Milano)

Lecture: Energy devices what's behind them? The Surgeon's perspective

02:30 C. Huscher (Abano Terme)

VIDEO SESSION: LIGHTS AND SHADOWS TIPS AND TRICKS AND PITFALLS

Video 1 HPB

02:40 A. Massobrio (Genova)

02:47 Expert: L. Aldrighetti (Milano)

Video 2 Lower GI

02:50 V. Pappalardo (Varese)

02:57 Expert: G.A. Baldazzi (Milano)

Video 3 Toracic

03:00 M. Manitto (Genova)

03:07 Expert: P. Capelli (Piacenza)

Video 4 Thyroid

03:10 M. Minuto (Genova)

03:17 Expert: M. Testini (Bari)

Video 5 Upper GI

03:20 G. Zimmiti (Brescia)

03:27 Expert: M. Martinotti (Cremona)

Video 6 Elettrochemoterapy

03:30 N. Solari (Genova)

03:37 Expert: F. De Cian (Genova)

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

Take home message

03:40

E. Ancona (Abano Terme)

03:45

Round Table

Chairman:

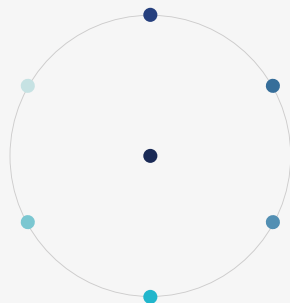
- F. Ratti (Milano)

Panelists:

- F. Agresta (Adria)
- M. Carlini (Roma)
- E. Opocher (Milano)
- S. Rausei (Varese)
- M. Saddemi (Genova)
- N. Vettoretto (Brescia)

Selected issues

- How to evaluate the performance?
- What's missing
- Costs



THE FUTURE

HIFU: High intensity focused ultrasound

04:05

A. Menciasci (Pisa)

LASER Surgery

04:15

A. Acemoglu (Genova)

FRIDAY 22ND MARCH

Ponte A Room

08:30 a.m. **Endovascular surgery for complex aortic pathology** **2 crediti ECM**
10:30 a.m.

10:30 a.m. Coffee Break

10:30 a.m. 
12:30 p.m.

01:00 p.m. Break

02:30 p.m. **Rehabilitation and enhanced recovery after surgery** **2 crediti ECM**
04:30 p.m.

FRIDAY 22ND MARCH

PONTE A ROOM

08.30 a.m. - 10.30 a.m.

Endovascular surgery for complex aortic pathology

President: D. Palombo (Genova)

Chairmen: B. Rosa (F), G. Galzerano (Siena), E. Giacomelli (Firenze)

New imaging method to reduce iodic contrast use

08:30 M. Basile (Bari)

08:37 Meet the Expert: G. Palasciano (Siena)

Treatment of complex aortic disease with standard grafts

08:40 M. Brunoro (Roma)

08:47 Meet the Expert: C. Pratesi (Firenze)

New perspectives in custom-made grafts for complex aortic disease

08:50 G. Pratesi (Genova)

08:57 Meet the Expert: R. Berchiolli (Pisa)

Advanced technology in follow-up after endovascular treatment

09:00 A. Settembrini (Milano)

09:07 Meet the Expert: W. Dorigo (Firenze)

The importance of simulation in endovascular training for complex aortic pathology

09:10 M. Marconi (Pisa)

09:17 Meet the Expert: P. Sirignano (Roma)

Lecture: surgical treatment of TEVAR and FEVAR complications

09:20 S. Mambrini (Genova)

Novel technologies and robotics in endovascular navigation

09:27 B. Rosa (F), E. Vander Poorten (BE)

Aortic Biomechanics before and after TEVA

09:37 M. Conti (Pavia)

09:44 Meet the Expert: B. Pane (Genova)

SELECTED ABSTRACT

- 09:51 **Correlation between peroperative complications and ulcerated carotid plaque: personal experience in 964 patients**
Matteo Brunoro, Laura Capoccia, Pasqualino Sirignano, Martina Formiconi, Federica Fornelli, Enrico Sbarigia, Francesco Speciale
- 09:58 **Contrast enhanced ultra sound for evar monitoring: a safe method for patients**
Ilenia D'Alessio, Alberto Settembrini, Maurizio Domanin, Silvia Romagnoli, Santi Trimarchi
- 10:05 **Contact force compensation of a catheter tip for minimally invasive cardiovascular surgery**
O. Al-Ahmad, M. Ourak, E. Vander Poorten
- 10:12 **Endovascular repair of complex aortic aneurysm**
Francesco Gonfiantini, Aaron Thomas Fargion, Fabrizio MAsciello, Sara Speziali, Alberto Melani, Laura Paperetti

FRIDAY 22ND MARCH

PONTE A ROOM

02.30 p.m. – 04.30 p.m.

Rehabilitation and enhanced recovery after surgery

Presidents: F. Borghi (Cuneo), A. Gratarola (Genova)

Chairmen: L. Conti (Piacenza), M. Pezzuto (Bari)

Panelists: E. Grant (USA), G. Garulli (Rimini), S. Giungato (Taranto), M. Laffranchi (Genova),
C. Giannotti (Genova), M. Pavanello (Conegliano Veneto)

Lecture: the history of ERAS

02:30 M. Scatizzi (Prato)

ERAS-Pathways. New trends in anesthesiology

02:40 A. Fasciolo (Genova)

Colorectal surgery it's time for ultra fast track

02:47 C. Vallicelli (Rimini)

Thoracic surgery what's new?

02:54 N. P. Ardò (Foggia)

ERAS for frail patient impossible is nothing

03:01 P. Tomaiuolo (Roma)

Take home message

03:08 M. Braga (Milano)

REHABILITATION

New trend in rehabilitation

03:13 F. Bressi (Roma)

Can Technology improve patient outcome?

03:23 L. Zollo (Roma)

Robotic technologies for rehabilitation

03:33 J. Saglia (Genova)

Development of an upper-limb exoskeleton for rehabilitation after surgery

03:43 M. Laffranchi (Genova)

Take home message

03:53 G. Forno (Genova)

SELECTED ABSTRACT

03:58 Application of the eras pathway in a general thoracic surgery unit

Michele Piazzolla, Nicoletta Pia Ardò, Domenico Loizzi, Fabio Nicola Fatone, Giulia Pacella, Francesco Sollitto

04:05 Accuracy of 3d modelling techniques for the human knee

S.M. Forte, F. Tatti, F. Rodriguez y Baena

04:12 Enhanced recovery after surgery (eras) pathway in oesophagectomy: can the post operative hospitalization be predicted?

Marco Palucci, Raffaele Cerchione, Lorenzo Cinelli, Andrea Cossu, Francesco Puccetti, Paolo Parise, Riccardo Rosati

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

FRIDAY 22ND MARCH

Roma / Doria Room

08:30 a.m. Cras/Spigc Communications V
10:30 a.m.

10:30 a.m. Coffee Break

10:30 a.m.
12:30 p.m.



01:00 p.m. Break

02:30 p.m. Cras/Spigc Communications VII
04:30 p.m.

FRIDAY 22ND MARCH

ROMA / DORIA ROOM

08.30 a.m. - 10.30 a.m.

Cras/Spigc Communications V

President: C. De Werra (Napoli)

Panelists: G. Dagnino (UK), D. Fasano (Bologna), P. Fiorini (Verona)

- **Surgical gesture and error recognition with time delay neural network on kinematic data**
G. Menegozzo, D. Dall'Alba, C. Zona P. Fiorini
- **Anastomosis leak and indocyanine green fluorescence imaging in colon-rectal surgery. A single center**
Pasquale Losurdo, Davide Cosola, Tommaso Cipolat, Laura Bonadio, Alan Biloslavo, Nicolò de Manzini
- **Clinical benefits of unilateral adrenalectomy in patients with subclinical hypercortisolism due to adrenal incidentaloma: results from a single center.**
Daniele Crocetti, Giuseppe Cavallaro, Mariarita Tarallo, Ambra Chiappini, Riccardo Avantifiori, Giuseppina Frattolillo
- **Parathyroid reimplantation with pr-fast technique in unselected patients during thyroidectomy. A case series with long term follow up confirming graft vitality and parathormone production**
Daniele Crocetti, Giuseppe Cavallaro, Mariarita Tarallo, Antonietta De Gori, Luca Giordano, Maria Vittoria Carati
- **Pneumothorax: a rare complication of colonoscopy. A systematic review of literature.**
Daniele Crocetti, Giuseppe Cavallaro, Mariarita Tarallo, Antonietta De Gori, Riccardo Avantifiori, Giuseppina Frattolillo
- **Predictors of behaviour in solitary fibrous tumours of the pleura surgically resected: analysis of 107 patients**
Alice Bellini, Giuseppe Marulli, Cristiano Breda, Pia Ferrigno, Stefano Terzi, Ivan Lomangino, Fabio Lo Giudice, Claudia Brombin, Marco Mamma, Sara Rossi, Andrea Lloret Madrid, Marco Schiavon, Federico Rea
- **Image-guided surgery in the head and neck: what's the status and where are we going?**
Leonardo Franz
- **T4 lung cancer invading the descending thoracic aorta: a case successfully treated with surgery by a multidisciplinary thoracic and vascular team**
Angela De Palma, Giulia Nex, Giulia De Iaco, Debora Brasca, Giuseppe Marulli

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

- **Criticism of learning curve in laparoscopic adrenalectomy: a systematic review**

Mariarita Tarallo, Daniele Crocetti, Ambra Chiappini, Antonietta De Gori, Valerio Scarano Catanzaro, Giuseppe Cavallaro

- **New technologies in orthognathic surgery: cad/cam cutting guides and customized titanium plates for waferless repositioning of the facial bones**

Giovanni Crivellaro, Federico Baietto, Federico Apolloni, Stefano Fusetti

- **Chylous leakage after left axillary lymph node dissection: incidence, clinical aspect and management**

Francesca Depaoli, Marco Gipponi, Piero Fregatti, Federica Murelli, Francesco Boccardo, Sara Dessalvi, Daniele Friedman

- **Endobronchial ultrasound for diagnosis and staging of lung cancer: our experience**

Angela De Palma, Elena Maiolino, Teodora Panza, Francesca Signore, Giuseppe Marulli

- **3D laparoscopic total splenectomy with robotic camera control for rare splenic hilum neoplasm associated with cholecystectomy**

Carlo Di Marco, Carlo Sernagiotto, Roberto Rizzato, Mattia Trevisan, Samuele Galati Rando, Gaia Arman, Olga Spiriadou, Renata Lorenzetti, Maurizio Pavanello

- **Short-term clinical outcomes of closure loop ileostomy. A report of our experience.**

Roberto Pezzuto, Aldo Rocca, Daniela Rega, Ugo Pace, Dario Scala, Massimiliano di Marzo, Paolo Delrio

- **Resective surgery for retroperitoneal sarcoma. A single-centre experience**

Roberto Pezzuto, Aldo Rocca, Daniela Rega, Ugo Pace, Dario Scala, Massimiliano di Marzo, Paolo Delrio

- **Use of coaxial drainage after pulmonary lobectomy: a randomized prospective study**

Camilla Poggi, Ylenia Pecoraro, Carolina Carillo, Sara Mantovani, Giuseppe Naldi, Andreina Pagini, Federica D'Agostino, Davide Amore, Massimiliano Bassi, Marco Ceccherini, Sara Cagnetti, Emilia Mottola, Daniele Diso, Tiziano De Giacomo, Erino Angelo Rendina, Federico Venuta, Marco Anile

- **Duodenal dieulafoy's lesion: a case report**

Livia Manfredini, Vincenzo Pappalardo, Gabriele Soldini, Valentina Iori, Riccardo Broggi, Andrea Romanzi, Elia Zani, Davide Inversini, Andrea Leotta, Giuseppe Ietto, Lorenzo Latham, Giulio Carcano

- **Anastomotic leaks after ivor-lewis esophagectomy: indocyanine green near-infrared angiography for gastric conduit blood supply**

Andrea Cossu, Paolo Parise, Francesco Puccetti, Raffaele Cerchione, Marco Palucci, Ugo Elmore, Riccardo Rosati

- **Minimally invasive surgery eversion overtube**

F. Putzu, T. Abrar, J. Konstantinova, K. Althoefer

- **Including temporal information in deep-learning based joint estimation of Surgical instruments**
E. Colleoni, S. Moccia, X. Du, E. De Momi, D. Stoyanov
- **Comparing users performances in a virtual reality surgical task under different camera control modalities: a pilot study towards the introduction of an autonomous camera**
Andrea Mariani, Giorgia Colaci, Nicole Sanna, Eleonora Vendrame, Elena De Momi
- **A deep reinforcement learning approach for inverse kinematics of concentric tube robots**
K. Iyengar, G. Dwyer, D. Stoyanov

FRIDAY 22ND MARCH

ROMA / DORIA ROOM

02.30 p.m. – 04.30 p.m.

Cras/Spigc Communications VII

President: E. De Momi (Milano)

Panelists: A. Geraldès (Genova), G. Formisano (Grosseto), E. Stratta (Genova)

- **Robotic trans-gastric drainage and debridment of walled-off pancreatic necrosis with the use of the endowrist stapler for the da vinci xi**
Matteo Palmeri, Desirée Gianardi, Niccolò Furbetta, Simone Guadagni, Gianni Stefanini, Gregorio Di Franco, Cristiano D'Isidoro, Matteo Bianchini, Giovanni Caprili, Luca Morelli
- **Robot-assisted splenic artery aneurysmectomy with spleen preservation and vascular reconstruction**
Matteo Palmeri, Desirée Gianardi, Niccolò Furbetta, Simone Guadagni, Gianni Stefanini, Gregorio Di Franco, Cristiano D'Isidoro, Matteo Bianchini, Giovanni Caprili, Luca Morelli
- **Locally advanced pancreatic cancer treated with the da vinci xi: a robot-assisted appleby pancreatotomy**
Gregorio Di Franco, Niccolò Furbetta, Desirée Gianardi, Simone Guadagni, Gianni Stefanini, Matteo Palmeri, Cristiano D'Isidoro, Matteo Bianchini, Giovanni Caprili, Luca Morelli
- **Robot-assisted left epatectomy with the da vinci XI**
Matteo Palmeri, Desirée Gianardi, Niccolò Furbetta, Simone Guadagni, Gianni Stefanini, Gregorio Di Franco, Cristiano D'Isidoro, Matteo Bianchini, Giovanni Caprili, Luca Morelli
- **Robot-assisted epiphrenic diverticulectomy and heller myotomy**
Angela Romano, Lorenzo Mariani, Michele De Rosa, Paolo Stella, Marcello Boni, Fabio Ermili, Maria Teresa Federici, Mauro Patiti, Andreino Tassi, Walter Bugiantella, Piergiorgio Tacchi, Graziano Ceccarelli
- **Robot-assisted right adrenalectomy for solitary metastatic disease from lung cancer**
Angela Romano, Lorenzo Mariani, Michele De rosa, Paolo Stella ,Andreino Tassi, Marcello Boni, Mariateresa Federici, Mauro Patiti, Walter Bugiantella, Piergiorgio Tacchi, Graziano Ceccarelli
- **Intraoperative near infrared fluorescence for sentinel lymph node mapping during robotic-assisted laparoscopic surgery for endometrial cancer**
Fabio Barra, Maria Grazia Centurioni, Simone Ferrero, Claudio Gustavino, Franco Alessandri

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

- **Feasibility of robotic multisite-site hysterectomy with sentinel node mapping for treating gynecological malignancies: the genoa experience**

Fabio Barra, Maria Grazia Centurioni, Valerio Gaetano Vellone, Claudio Gustavino, Simone Ferrero, Franco Alessandri

- **Robotic assisted surgery in the treatment of chronic sigmoid diverticular disease. A preliminary experience**

Francesco Fragassi, Alessandro Pasculli, Valentina Ferraro, Claudia De Giorgi, Maria Luisa Montanaro, Annamaria Spadone, Francesco Vittore, Giuseppe Massimiliano De Luca, Graziano Ceccarelli, Angela Gurrado, Mario Testini

- **Robotic repair of parastomal hernia with trasversus abdominis release**

Sofia Esposito, Lucia Salvischiani, Giuseppe Giuliani, Diego Giulitti, Giampaolo Formisano, Paolo Pietro Bianchi

- **Robotic transabdominal retromuscular umbilical hernia repair**

Giuseppe Giuliani, Lucia Salvischiani, Adelona Salaj, Canegallo Fiorella, Giampaolo Formisano, Paolo Pietro Bianchi

- **The impact of elderly on surgical outcomes after ivor-lewis esophagectomy: review of a single institution experience**

Andrea Cossu, Paolo Parise, Francesco Puccetti, Raffaele Cerchione, Marco Palucci, Ugo Elmore, Riccardo Rosati

- **Twenty years of evolution of splenectomy: from traditional laparoscopy to single-port, to double-port with hand assistance: experience of our centre**

Denise Palombo, Marco Casaccia, Marco Frascio, Rosario Fornaro, Cesare Stabilini, Franco De Cian

- **Endoscopic evaluation after stapled colo-rectal anastomosis for assessment and prevention of anastomotic complications**

Enrico Fantini, Basilio Pirrera, Carlo Vallicelli, Vincenzo Alagna, Gianluca Garulli

- **Antrum gastric cancer. Totally laparoscopic subtotal gastrectomy**

Giuseppe Lamacchia, Giulia Tarantino, Domenico Spoletini, Massimo Carlini

- **Advanced sigmoid cancer, infiltrating left ureter. Totally laparoscopic sigmoidectomy with left ureter resection/reconstruction**

Giulia Tarantino, Giuseppe Lamacchia, Domenico Spoletini, Massimo Carlini

- **Left adrenal adenomas. Laparoscopic left adrenalectomies**

Giovanni Maria Garbarino, Giuseppe Lamacchia, F. Pedicini, Giulia Tarantino, Domenico Spoletini, Massimo Carlini

- **Left colic vessels in laparoscopic colonic resection**

G. Lisi, Giovanni Maria Garbarino, Domenico Spoletini, Massimo Carlini

- **Development of different grasp type handles for a haptic telemanipulator**

E. I. Zoller, P. Salz, P. C. Cattin, A. Zam, G. Rauter

- **Novel capacitive-based sensor technology for augmented proximity detection**

M. Chiurazzi, G.G. Garozzo, P. Dario, G. Ciuti

- **Autonomous pre-planned lift-and-place of a novel robotic surgery imagining rail using the dvrk platform**

C. D'Ettorre, A. Stilli, G. Dwyer, M. Tran, D. Stoyanov

- **A hybrid visual servoing approach for robotic laser tattoo removal**

D. Salerno, V. Penza, C. Fantacci, A. Acemoglu, G. Muscato, L. S. Mattos

- **Ap surg: abdominal positioning surgical system. A preliminary study**

V. Penza, L.S. Mattos

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

FRIDAY 22ND MARCH

Raffaello Room

08:30 a.m. **Cras/Spigc Communications VI**
10:30 a.m.

10:30 a.m. Coffee Break

10:30 a.m.
12:30 p.m.



01:00 p.m. Break

02:30 p.m. **Cras/Spigc Communications VIII**
04:30 p.m.

FRIDAY 22ND MARCH

RAFFAELLO ROOM

08.30 p.m. - 10.30 a.m.

Cras/Spigc Communications VI

President: S. Pucciarelli (Padova)

Panelists: P. De Nardi (Milano), A. Geraldès (Genova), R. Polastri (Biella)

- **Perforated appendicitis with peritonitis and abdominal abscesses: laparoscopic treatment**
Mariarita Tarallo, Giuseppe Cavallaro, Daniele Crocetti, Ambra Chiappini, Giuseppina Frattolillo
- **Ruptured splenic artery aneurysm with intraparietal gastric hematoma as unusual cause of hemorrhagic shock: damage control strategy for a non-trauma abdominal emergency**
Stefano Cioffi, Luca Del Prete, Alice Mangili, Marina Pighin, Laura Briani, Stefania Cimbanassi, Osvaldo Chiara
- **How to organize a 7 days cleft lip and palate humanitarian surgical mission: our experience**
Luca Rosato, Marco Stabile, Alessandro Giacomina, Gian Luca Gatti, Silvio Podda
- **Perioperative and 30-days outcomes of combined carotid artery revascularization and cardiac surgery: a retrospective monocentric experience**
Gulia Bassoli, Walter Dorigo, Elena Giacomelli, Giulia Bertagna, Carlo Pratesi
- **Acute pancreatitis after parathyroid surgery**
Serena Fulginiti, Vincenzo Tiesi, Rita Gervasi, Nadia Innaro
- **Expression of the inhibitory t lymphocytes in patients with colorectal cancer. A clinical pilot study**
Marco Giovenzana, Nicolò maria Mariani, Caterina Froiio, Marta Bonaldi, Andrea Pisani Ceretti, Paola Gruarin, Claudia Cigala, Enrico Opocher
- **Extrapleural intrabdominal solitary fibrous tumor: a case report and literature review**
Caterina Froiio, Marco Giovenzana, Nicolò maria Mariani, Marta Bonaldi, Eleonora Monti, Matteo Barabino, Andrea Pisani Ceretti, Enrico Opocher
- **The new trend of pre-pectoral breast reconstruction: an objective evaluation of the quality of online information for patients undergoing breast reconstruction**
Marco Marcasciano, Jacopo Maria Frattaroli, Francesco Mori, Federico Lo Torto, Paolo Fioramonti, Enrico Cavalieri, Juste Kaciulyte, Manfredi Greco, Donato Casella, Diego Ribuffo

- **Acute lymphangitis and lymphatic skin ulcers in outpatients surgical service**
Alberto Macciò
- **Computer-guided head and neck surgical oncology: evolving concepts**
Francesco Arcuri, Irene Panisi, Valerio Zanchi, Giuseppe Spinelli
- **An app in proctology: innovative solutions to improve the life of the patient and the surgeon**
Davide Telesco, Daniele Passannanti, Fabio Gaj
- **LY.M.P.H.A. Technique for the prevention of early and late complications in melanoma treatment**
Sara Dessalvi, Matteo Mascherini, Marcella Cavelli, Franco De Cian, Francesco Boccardo
- **The role of cad-cam technology in the reconstruction of facial skeleton**
Anita Tronchet, Vincenzo Palazzolo, Marta Merlini
- **Post-mastectomy upper limb lymphedema: combined vascularized lymph node transfer and scar release with fat graft**
Rossella Elia, Michele Maruccia, Paolo Claudio Marannino, Giuseppe Giudice
- **Svei: smart venous entry indicator**
Z. Cheng, B. L. Davies, L. Guastini, D. G. Caldwell, L. S. Mattos
- **Identification of box-jenkins model for a magnetically actuated fiber-coupled laser for computer-assisted laser microsurgery**
Hamed Mohammadbagherpoor, Edward Grant
- **Design and study of a next-generation computer-assisted system for transoral laser microsurgery**
N. Deshpande, A. Acemoglu, G. Peretti, F. Mora, L. Guastini, J. Lee, G. Barresi, D. G. Caldwell, L. S. Mattos
- **A robotic platform for neuroendoscopic procedures in neo-natal and infants**
Nabeel Kamal, Armando Cama, Leonardo S. Mattos
- **Electrical bio-impedance proximity sensing for intra-ocular surgery**
L. Schoevaerdt, D. Reynaerts, E. Vander Poorten
- **The design of a novel visual interface for the 3d steering of programmable bevel-tip needles (pbn) during neurosurgery**
E. Matheson, R. Secoli, F. Rodriguez Y Baena

FRIDAY 22ND MARCH

RAFFAELLO ROOM

02.30 p.m. – 04.30 p.m.

Cras/Spigc Communications VIII

President: F. Selvaggi (Napoli)

Panelists: A. Luzzi (Genova), L. D'Ambra (La Spezia)

- **Right colon cancer. Totally laparoscopic right colectomy**
G. Lisi, G. Tarantino, G. Lamacchia, D. Spoletini, M. Carlini
- **Awake video-assisted thoracic surgery (vats) in obese patients with interstitial lung disease: a multicenter study**
Pietro Bertoglio, Francesco Guerrera, Andrea Viti, Lorena Costardi, Paraskevas Lyberis, G Verri, E Ceraolo, Giulio Rosboch, Carlo Albera, Pier Luigi Filosso, Luca Brazzi, Alberto Claudio Terzi, Enrico Ruffini
- **Laparoscopic nerve-sparing radical hysterectomy, rectal shaving and sigmoid resection for deep infiltrating endometriosis causing bowel subocclusion and left grade-3 hydronephrosis**
Pier Carlo Zorzato, Gabriele Lanzo, Davide Gallina, Manuela Rosa, Stefania Ferrari, Luisa Zegna, Roberto Polastri, Stefano Uccella, Pier Carlo Zorzato
- **Long-term outcome after blebectomy-pleurectomy for spontaneous pneumothorax in young patients: single center experience.**
Jessica Costa, Maria Cattoni, Silvia De Maio, Federica Vergani, Fabio Berizzi, Grazia Torrigiotti, Luigi Festi, Nicola Rotolo, Andrea Imperatori
- **Lung sparing wedge resection using endobronchial balloon catheter**
Sara Pieropan, Paolo Mendogni, Lorenzo Rosso, Mario Nosotti
- **Laparoscopic resection of voluminous left paraortic paraganglioma**
Maura De Francesco, Simona Macina, Ludovica Baldari, Michele Ballabio, Andrea Spota, Elisa Cassinotti, Luigi Boni
- **Fertility, pregnancy and delivery outcomes after the use of unidirectional knotless barbed suture during laparoscopic surgical approach for uterine myomas**
Fabio Barra, Franco Alessandri, Carolina Scala, Umberto Leone Roberti Maggiore, Simone Ferrero
- **Morcellation during laparoscopic myomectomy: description of an innovative contained in-bag system**
Fabio Barra, Matteo Tantari, Giulio Evangelisti, Simone Ferrero

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

- **Single-port versus multiport laparoscopy for performing bilateral salpingo-oophorectomy in patients carrying brca mutations**
Fabio Barra, Franco Alessandri, Valerio Gaetano Vellone, Claudio Gustavino, Simone Ferrero, Maria Grazia Centurioni
- **Uniportal right upper lobe sleeve lobectomy for lung cancer**
Francesco Damarco, Valeria Musso, Alessandra Mazzucco, Margherita Cattaneo, Sara Pieropan
- **Pre-and intraoperative evaluation of glottic lesion in the planning of excision biopsy; experience in 282 patients**
Daniela Traverso, Antonio Cavallero, Marco Giudice
- **Laparoscopic gastric resections are safe and effective in gastric cancer treatment regardless of comorbid burden and pathological stages**
Francesco Puccetti, Paolo Parise, Andrea Cossu, Marco Palucci, Raffaele Cerchione, Riccardo Rosati
- **The treatment of parapneumonic pleural effusions and empyema thoracis: less is more?**
Stefano Congiu, Sara Mazzarra, Elisa Vanino, Marco Trotta, Alessio Campisi, Nicola Dentale, Domenica Giunta, Franco Stella, Giampiero Dolci, Niccolò Daddi
- **Gastric schwannoma: a rare clinical entity. Diagnostic difficulties and treatment**
Martina Giussani, Pierpaolo Mariani, Fabio Tagliabue, Roberta Carminati
- **Medrobotics flex® robotic system for transanal excision of a large rectal neoplasm: the first european experience**
Edoardo Forcignanò, Alberto Arezzo, Simone Arolfo, Mauro Verra, Giacomo Lo Secco, Mario Morino
- **Single bidirectional barbed suture with midline locking mechanism for transanal transverse wound closure**
Giacomo Lo Secco, Alberto Arezzo, Simone Arolfo, Edoardo Forcignanò, Mauro Verra, Mario Morino
- **Use of electromagnetic surgical navigation system in a case of melanocytic orbital schwannoma**
Chiara Fossati, Guido Bissoletti, Federico Baietto, Marco Sagron, Stefano Fusetti
- **Laparoscopic treatment of intestinal malrotation in the young adult**
Michele Ballabio, Simona Macina, Ludovica Baldari, Maura De Francesco, Ludovica Baldari, Andrea Spota, Silvia Petrucci, Massimiliano Della Porta, Elisa Cassinotti, Luigi Boni

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

FRIDAY 22ND MARCH

Leonardo Room

08:30 a.m. **Appendectomy Guidelines**
10:30 a.m.

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

FRIDAY 22ND MARCH

LEONARDO ROOM

08.30 a.m. – 10.30 a.m.

Appendectomy Guidelines

Chairmen: E. Orsenigo (Milano)

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

FRIDAY 22ND MARCH

Michelangelo Room

08:30 a.m. **DIH Workshop**
10:30 a.m.

10:30 a.m. Coffee Break

10:30 a.m.
12:30 p.m.



01:00 p.m. Break

02:30 p.m. **Vascular Suture (Course)**
04:30 p.m.

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

FRIDAY 22ND MARCH

MICHELANGELO ROOM

08:30 a.m. - 10:30 a.m.

DIH Workshop

Chairmen:CRAS

FRIDAY 22ND MARCH

MICHELANGELO ROOM

02.30 p.m. – 04.30 p.m.

Vascular Suture (Course)

Tutors: N. Montelione (Roma), P. Sirignano (Roma), G. Spinella (Genova)

- 02:30** Techniques of vascular surgery
- Practice on simulation systems
- Final Evaluation Test

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

FRIDAY 22ND MARCH

Elettra Room

08:30 a.m. **Thoracic Drainage Emergency Placement (Course)** **180 posti**
10:30 a.m.

10:30 a.m. Coffee Break

10:30 a.m. 
12:30 p.m.

01:00 p.m. Break

02:30 p.m. **Thoracic Wall Repair (Course)** **180 posti**
04:30 p.m.

FRIDAY 22ND MARCH

ELETTRA ROOM

08.30 a.m. – 10.30 a.m.

Thoracic Drainage Emergency Placement (Course)

President: G. Pariscenti (Genova)

Tutors: N.P. Ardò (Foggia), A. De Palma (Bari), E. Ferrari (Genova) M.S. Gallazzi (Brescia),
M. Manitto (Genova)

08:30 **Indications**

M. Manitto (Genova)

How to do it

M.S. Gallazzi (Brescia)

Pitfalls and management of complications

A. De Palma (Bari)

Practice on simulation systems

Final Evaluation Test

FRIDAY 22ND MARCH

ELETTRA ROOM

02.30 p.m. – 04.30 p.m.

Thoracic Wall Repair (Course)

President: G. Muriana (Mantova)

Tutors: A. De Palma (Bari), E. Ferrari (Genova) M.S. Gallazzi (Brescia), M. Manitto (Genova),
P. Mendogni (Milano), G. Pariscenti (Genova)

02:30

Indications

E. Ferrari (Genova)

How to do it

P. Mendogni (Milano)

Pitfalls and management of complications

A. De Negri (Genova)

Practice on simulation systems

Final Evaluation Test

30° Congresso Nazionale SPIGC

Encouraging Young Surgeons and Engineers

9th Joint Workshop on New Technologies for Computer/Robot Assisted Surgery CRAS

Con il contributo non condizionante di:

PLATINUM



GOLD



Medtronic

stryker

SILVER



multimed srl
praxi medici chirurgici

BRONZE



OLYMPUS



dottori.it



PICCIN

