

## Dr Michele Diana MD, Ph.D

- Nationality : Italian
  - Private address: 5, Rue d'Eckbolsheim, 67380 Lingolsheim, France
  - Telephone: +33369964058
  - Mobile : +33651186529
  - E-mail: [michelediana@virgilio.it](mailto:michelediana@virgilio.it); [michele.diana@ircad.fr](mailto:michele.diana@ircad.fr)
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### Professional Experience

- **November 2014 to date** Institute of Image-Guided Surgery, IHU-Strasbourg, France
  - **Director of the Research Unit on Endo-Laparoscopic Procedures**
  - **Coordinator of the IHU and IRCAD Research fellowship programs**
- **July 2013 – November 2014** Institute of Image-Guided Surgery, IHU-Strasbourg, France
  - **Senior Medical Researcher with expertise in experimental minimally-invasive surgery, interventional endoscopy and interventional radiology**
  - **Coordinator of the IHU and IRCAD Research fellowship program**
- **October 2012 – July 2013** Institute of Image-Guided Surgery, IHU-Strasbourg, France
  - **IHU Biodesign program coordinator (I-SIP, IHU-School of Innovation Program), supervised by Prof Lee Swanstrom**
- **April 2010 - October 2012** Research Institute Against Digestive System Cancer (IRCAD) & European Institute of Tele-Surgery (EITS), Strasbourg (France)
  - **Research Fellowship in Minimally Invasive Surgery (Sponsored by CHUV)**
- **October 2006- March 2010** University Hospital of Lausanne (CHUV), Lausanne (Switzerland)
  - **General, Emergency and Digestive Surgery Residency**  
  
Clinical rotations in:
    - Intensive Care Unit (6 months)
    - Emergency Department (1 year)
    - Orthopaedics and Traumatology Department (6 months)
    - Visceral Surgery Department (18 months)
- **April 2006- October 2006** Central Institute of the Valais Hospitals, Sion (Switzerland)
  - **Emergency Surgery Residency (6 months)**

**April 2005- March 2006** Regional Hospital of Neuchâtel, Neuchâtel (Switzerland)

➤ Digestive Surgery Residency (1 year)

▪ **1999-2005** Catholic University of the Sacred Heart, Rome (Italy)

➤ 6 months residency in General Surgery

➤ 2 years internship in Internal Medicine

➤ 1 year internship in Gastroenterology

➤ 1 year internship in Pathology

### **Education**

▪ **2016** Doctoral School Life and Health of the University of Strasbourg

➤ **PhD in Medical Sciences**

*Thesis:* Fluorescence-based Enhanced Reality for real-time evaluation of visceral perfusion

▪ **2013** Practical School of High Studies, Sorbonne University (Paris) and Medical School of Dijon (France)

➤ Certificate for Animal Experimentation (Level 1, Responsible for Research Projects)

▪ **2011** Pierre & Marie Curie University, Paris (France)

➤ **University Diploma in Biomedical Engineering** (Score: *Very Good*)

*Thesis:* Concept, design and development of a novel minimal invasive magnetic anastomotic device.

▪ **2010** University of Strasbourg (France)

➤ Certificate for Animal Experimentation (Level 2, Authorization to practice on animals)

▪ **2003** Catholic University of the Sacred Heart, Rome (Italy)

➤ **Medical Degree** (Score: *Summa cum Laude*)

*Thesis:* The role of impaired intestinal permeability and resident microbiota overgrowth in the passage from Non-Alcoholic Steatosis to Non-Alcoholic Steato-hepatitis.

▪ **1995** High School Casamari's Abbey College, (Italy)

➤ Senior High School specializing in classical studies (Score: *60/60*)

**Peer-reviewed publications (As per August 2016; H-Index = 20)**

- **Diana M**, Schiraldi L, Liu YY, Memeo R, Mutter D, Pessaux P, Marescaux J. High intensity focused ultrasound (HIFU) applied to hepato-bilio-pancreatic and the digestive system-current state of the art and future perspectives. *Hepatobiliary Surg Nutr.* 2016 Aug;5(4):329-44.
- **Diana M**, Liu YY, Pop R, Kong SH, Legnèr A, Beaujeux R, Pessaux P, Soler L, Mutter D, Dallemagne B, Marescaux J. Superselective intra-arterial hepatic injection of indocyanine green (ICG) for fluorescence image-guided segmental positive staining: experimental proof of the concept. *Surg Endosc.* 2016 Aug 5
- **Diana M**, Noll E, Charles AL, Diemunsch P, Geny B, Liu YY, Marchegiani F, Schiraldi L, Agnus V, Lindner V, Swanström L, Dallemagne B, **Marescaux J**. Precision real-time evaluation of bowel perfusion: accuracy of confocal Endomicroscopy assessment of stoma in a controlled hemorrhagic shock model. *Surg Endosc.* 2016 Jun 20.
- Diemunsch PA, Noll E, Pottecher J, **Diana M**, Geny B, Joshi GP. Impact of nitrous oxide on the haemodynamic consequences of venous carbon dioxide embolism: An experimental study. *Eur J Anaesthesiol.* 2016 May;33 (5):356-60.
- Franchini Melani AG, **Diana M**, **Marescaux J**. The quest for precision in transanal total mesorectal excision. *Tech Coloproctol.* 2015 Nov 26
- Noll E, **Diana M**, Diemunsch P. A Multimodal Approach to Prevent Laparoscopic High Peritoneal Air Fraction. *Anesth Analg.* 2015 Nov;121(5):1402.
- **Diana M**, Robinet E, Liu YY, Legnèr A, Kong SH, Schiraldi L, Marchegiani F, Halvax P, Swanstrom L, Dallemagne B, Marescaux J. Confocal Imaging and Tissue-Specific Fluorescent Probes for Real-Time In Vivo Immunohistochemistry. Proof of the Concept in a Gastric Lymph Node Metastasis Model. *Ann Surg Oncol.* 2015 Oct 28.
- Liu YY, Kong SH, **Diana M**, Lègner A, Wu CC, Kameyama N, Dallemagne B, **Marescaux J**. Near-infrared cholecysto-cholangiography with indocyanine green may secure cholecystectomy in difficult clinical situations: proof of the concept in a porcine model. *Surg Endosc.* 2015 Oct 28.
- **Diana M**, Usmaan H, Legnèr A, Yu-Yin L, D'Urso A, Halvax P, Nagao Y, Pessaux P, Marescaux J. Novel laparoscopic narrow band imaging for real-time detection of bile leak during hepatectomy: proof of the concept in a porcine model. *Surg Endosc.* 2015 Oct 20.
- Wu T, Bour G, Durand S, Lindner V, Gosse F, Zona L, Certoux JM, **Diana M**, Baumert TF, **Marescaux J**, Mutter D, Pessaux P, Robinet E. Use of a closed culture system to improve the safety of lentiviral vector production. *Hum Gene Ther Methods.* 2015 Oct 15
- Liu YY, Pop R, **Diana M**, Kong SH, Lègner A, Beaujeux R, **Marescaux J**. Real-time fluorescence angiography by intra-arterial indocyanine green injection to identify obscure gastrointestinal bleeding territory: proof of concept in the porcine model. *Surg Endosc.* 2015 Aug 15.

- **Diana M**, Noll E, Diemunsch P, Moussallieh FM, Namer JJ, Charles AL, Lindner V, Agnus V, Geny B, **Marescaux J**. Metabolism-Guided Bowel Resection: Potential Role and Accuracy of Instant Capillary Lactates to Identify the Optimal Resection Site. *Surg Innov*. 2015 Aug 5. pii: 1553350615598620.
- Umale S, Deck C, Bourdet N, **Diana M**, Soler L, Willinger R. Experimental and finite element analysis for prediction of kidney injury under blunt impact. *J Biomech*. 2015 Jun 26. pii: S0021-9290(15)00348-6. doi: 10.1016/j.jbiomech.2015.06.011.
- Bodin F, **Diana M**, Koutsomanis A, Robert E, **Marescaux J**, Bruant-Rodier C. Porcine model for free-flap breast reconstruction training. *J Plast Reconstr Aesthet Surg*. 2015 Jun 12. pii: S1748-6815(15)00290-9. doi: 10.1016/j.bjps.2015.06.006.
- Kong SH, **Diana M**, Liu YY, Lee HJ, Legner A, Soares R, Swanström L, Dallemagne B, Yang HK, **Marescaux J**. Novel method for hybrid endo-laparoscopic full-thickness gastric resection using laparoscopic transgastric suture passer device. *Surg Endosc*. 2015 Jul 7
- **Diana M**, Noll E, Agnus V, Liu YY, Kong SH, Lègner A, Diemunsch P, **Marescaux J**. Reply to Letter: "Enhanced Reality Fluorescence Videography to Assess Bowel Perfusion: The Cybernetic Eye". *Ann Surg*. 2015 May 27.
- Hallet J, Soler L, **Diana M**, Mutter D, Baumert TF, Habersetzer F, **Marescaux J**, Pessaux P. Trans-thoracic minimally invasive liver resection guided by augmented reality. *J Am Coll Surg*. 2015 May;220(5):e55-60. doi: 10.1016/j.jamcollsurg.2014.12.053. Epub 2015 Jan 26.
- **Diana M**, Halvax P, Mertz D, Legner A, Brulé JM, Robinet E, Mutter D, Pessaux P, **Marescaux J**. Improving Echo-Guided Procedures Using an Ultrasound-CT Image Fusion System. *Surg Innov*. 2015 Jun;22(3):217-22. doi: 10.1177/1553350615577483. Epub 2015 Mar 22
- Chung H, **Diana M**, Liu KH, Katsichtis T, Dallemagne B, **Marescaux J**. East Meets West-A Novel Steerable Grasper to Facilitate Gastric Endoscopic Submucosal Dissection (ESD): Randomized Comparative Study in a Porcine Model. *Surg Innov*. 2015 Apr;22(2):117-22. doi: 10.1177/1553350614560272.
- Halvax P, **Diana M**, Lègner A, Lindner V, Liu YY, Nagao Y, Cho S, **Marescaux J**, Swanström LL. Endoluminal full-thickness suture repair of gastrotomy: a survival study. *Surg Endosc*. 2015 Jan 29
- **Diana M**, Swanström LL, Halvax P, Lègner A, Liu YY, Alzaga A, D'Urso A, **Marescaux J**. Esophageal covered stent fixation using an endoscopic over-the-scope clip. Mechanical proof of the concept and first clinical experience. *Surg Endosc*. 2015 Jan 29
- **Diana M**, Agnus V, Halvax P, Liu YY, Dallemagne B, Schlagowski AI, Geny B, Diemunsch P, Lindner V, **Marescaux J**. Intraoperative fluorescence-based enhanced reality laparoscopic real-time imaging to assess bowel perfusion at the anastomotic site in an experimental model. *Br J Surg*. 2015 Jan;102 (2):e169-76. doi: 10.1002/bjs.9725
- **Diana M**, **Marescaux J**. Robotic surgery. *Br J Surg*. 2015 Jan;102(2):e15-28. doi: 10.1002/bjs.9711

- **Marescaux J, Diana M.**  
Next step in minimally invasive surgery: hybrid image-guided surgery. *J Pediatr Surg.* 2015 Jan;50(1):30-36.
- **Diana M, Pop R, Beaujeux R, Dallemagne B, Halvax P, Schlagowski I, Liu YY, Diemunsch P, Geny B, Lindner V, Marescaux J.**  
Embolization of Arterial Gastric Supply in Obesity (EMBARGO): an Endovascular Approach in the Management of Morbid Obesity. Proof of the Concept in the Porcine Model. *Obes Surg.* 2014 Dec 16.
- **Liu YY, Diana M, Halvax P, Cho S, Légner A, Alzaga A, Swanström L, Dallemagne B, Marescaux J.**  
Flexible endoscopic single-incision extraperitoneal implant and fixation of peritoneal dialysis catheter: proof of concept in the porcine model. *Surg Endosc.* 2014 Nov 21.
- **Marescaux J, Diana M.**  
Inventing the Future of Surgery. *World J Surg.* 2014 Nov 21.
- **Pessaux P, Diana M, Soler L, Piardi T, Mutter D, Marescaux J.**  
Towards cybernetic surgery: robotic and augmented reality-assisted liver segmentectomy. *Langenbecks Arch Surg.* 2014 Nov 13.
- **Marescaux J, Diana M, Soler L.**  
Application of a Three-Dimensional Print of a Liver in Hepatectomy for Small Tumors Invisible by Intraoperative Ultrasonography: Preliminary Experience. *World J Surg.* 2014 Oct 16
- **Diana M, Halvax P, Pop R, Schlagowski I, Bour G, Liu YY, Legner A, Diemunsch P, Geny B, Dallemagne B, Beaujeux R, Demartines N, Marescaux J.**  
Gastric Supply Manipulation to Modulate Ghrelin Production and Enhance Vascularization to the Cardia: Proof of the Concept in a Porcine Model. *Surg Innov.* 2014 Oct 7
- **Diana M, Callari C, D'Agostino J, Wu HS, Mutter D, Marescaux J.**  
Laparoscopic Tension-free Abdominal Wall Repair: Impact of Mesh Size and of Different Fixation Devices in a Consecutive Series of 120 Patients. *Surg Laparosc Endosc Percutan Tech.* 2014 Oct;24(5):461-4.
- **Cha R, Marescaux J, Diana M.**  
Updates on gastric electrical stimulation to treat obesity: Systematic review and future perspectives. *World J Gastrointest Endosc.* 2014 Sep 16;6(9):419-31. doi: 10.4253/wjge.v6.i9.419.
- **Diana M, Dallemagne B, Chung H, Nagao Y, Halvax P, Agnus V, Soler L, Lindner V, Demartines N, Diemunsch P, Geny B, Swanström L, Marescaux J.**  
Probe-based confocal laser endomicroscopy and fluorescence-based enhanced reality for real-time assessment of intestinal microcirculation in a porcine model of sigmoid ischemia. *Surg Endosc.* 2014 Jun 17
- **Diana M, Halvax P, Dallemagne B, Nagao Y, Diemunsch P, Charles AL, Agnus V, Soler L, Demartines N, Lindner V, Geny B, Marescaux J.**  
Real-time navigation by fluorescence-based enhanced reality for precise estimation of future anastomotic site in digestive surgery. *Surg Endosc.* 2014 Jun 10
- **Vix M, Diana M, Marx L, Callari C, Wu HS, Perretta S, Mutter D, Marescaux J.**

Management of Staple Line Leaks After Sleeve Gastrectomy in a Consecutive Series of 378 Patients. *Surg Laparosc Endosc Percutan Tech* 2014 Apr 19

- Pessaux P, **Diana M**, Soler L, Piardi T, Mutter D, **Marescaux J**.  
Robotic duodenopancreatectomy assisted with augmented reality and real-time fluorescence guidance. *Surg Endosc* 2014 Mar 8
- Nagao Y, **Diana M**, Vix M, D'Urso A, Mutter D, **Marescaux J**.  
Age impact on weight loss and glycolipid profile after laparoscopic sleeve gastrectomy: experience with 308 consecutive patients. *Surg Endosc.* 2014 Mar;28(3):803-10
- **Diana M**, Mutter D, Lindner V, Vix M, Chung H, Demartines N, **Marescaux J**.  
A modular magnetic anastomotic device for minimally invasive digestive anastomosis: proof of concept and preliminary data in the pig model. *Surg Endosc.* 2014 Jan 3
- Vix M, Liu KH, **Diana M**, D'Urso A, Mutter D, **Marescaux J**.  
Impact of Roux-en-Y gastric bypass versus sleeve gastrectomy on vitamin D metabolism: short-term results from a prospective randomized clinical trial. *Surg Endosc.* 2013 Nov 7.
- **Diana M**, Pessaux P, **Marescaux J**.  
New technologies for single-site robotic surgery in hepato-biliary-pancreatic surgery. *J Hepatobiliary Pancreat Sci.* 2013 Sep 30
- Marzano E, Piardi T, Soler L, **Diana M**, Mutter D, **Marescaux J**, Pessaux P.  
Augmented Reality-Guided Artery-First Pancreatico-Duodenectomy. *J Gastrointest Surg* 2013 Aug 14
- Seeliger B, Callari C, **Diana M**, Mutter D, Marescaux J  
Polypoid Gallbladder Lesion in the Context of Renal Cell Carcinoma: Is Laparoscopic Cholecystectomy a Reasonable Option? *Journal of Investigative Medicine High Impact Case Reports July-September 2013 1: 2324709613499008*, first published on July 23, 2013
- Liu KH, **Diana M**, Vix M, Mutter D, Wu HS, Marescaux J.  
Revisional surgery after failed adjustable gastric banding: institutional experience with 90 consecutive cases. *Surg Endosc.* 2013 Jul 9
- Wall J, **Diana M**, Leroy J, Deruijter V, Gonzales KD, Lindner V, Harrison M, Marescaux J  
MAGNAMOSIS IV: magnetic compression anastomosis for minimally invasive colorectal surgery. *Endoscopy* 2013 Jun 27
- **Diana M**, Chung H, Liu KH, Dallemagne B, Demartines N, Mutter D, Marescaux J  
Endoluminal surgical triangulation: overcoming challenges of colonic endoscopic submucosal dissections using a novel flexible endoscopic surgical platform. Feasibility study in a porcine model *Surg Endosc.* 2013 Jun 21
- D'Agostino J, **Diana M**, Vix M, Nicolau S, Soler L, Bourhala K, Hassler S, Wu HS, Marescaux J  
Three-Dimensional Metabolic and Radiologic Gathered Evaluation Using VR-RENDER Fusion: A Novel Tool to Enhance Accuracy in the Localization of Parathyroid Adenomas. *World J Surg.* 2013 Apr 5

- **Diana M**, Noll E, Diemunsch P, Dallemagne B, Benahmed MA, Agnus V, Soler L, Barry B, Namer IJ, Demartines N, Charles AL, Geny B, Marescaux J. Enhanced-Reality Video Fluorescence: A Real-Time Assessment of Intestinal Viability. *Ann Surg*. 2013 Mar 25
- Vix M, **Diana M**, Liu KH, D'Urso A, Mutter D, Wu HS, Marescaux J. Evolution of Glycolipid Profile After Sleeve Gastrectomy vs. Roux-en-Y Gastric Bypass: Results of a Prospective Randomized Clinical Trial. *Obes Surg*. 2013 May;23(5):613-21
- D'Agostino J, **Diana M**, Vix M, Soler L, Marescaux J. Virtual Neck Exploration prior to Parathyroidectomy. *N Engl J Med* 2012 13 Sep; 367;11
- Leroy J, **Diana M**, Barry B, Mutter D, Melani AG, Wu HS, Marescaux J. Perirectal Oncologic Gateway to Retroperitoneal Endoscopic Single-Site Surgery (PROGRESSS): A Feasibility Study for a New NOTES Approach in a Swine Model. *Surg Innov*. 2012 Jul 1.
- **Diana M**, Leroy J, Wall J, De Ruijter V, Lindner V, Dhumane P, Mutter D, Marescaux J. Prospective experimental study of transrectal viscerotomy closure using transanal endoscopic suture vs. circular stapler: a step toward NOTES. *Endoscopy* 2012 Jun;44(6):605-11
- Wall J, Perretta S, **Diana M**, Dhumane P, Haro JI, Dallemagne B, Becmeur F, Krummel T, Marescaux J. Submucosal Endoscopic Myotomies for Esophageal Lengthening: A Novel Minimally Invasive Technique with Feasibility Study. *Eur J Pediatr Surg* 2012 May 10
- Leroy J, **Diana M**, Callari C, Barry B, D'Agostino J, Wu J, Marescaux J. Laparoscopic extraperitoneal colostomy in elective abdomino-perineal resection for cancer. A single surgeon experience. *Colorectal Dis*. 2012 Mar 5
- Marescaux J, **Diana M** Chirurgie : les grandes mutations *La Revue du Praticien Médecine Générale*, 2011 dec;25 n°871 ([Article in French](#))
- Costantino FA, **Diana M**, Wall J, Leroy J, Mutter D, Marescaux J Prospective evaluation of peritoneal fluid contamination following transabdominal vs. transanal specimen extraction in laparoscopic left-sided colorectal resections. *Surg Endosc* 2011 Dec 17
- Leroy JL, Perretta S, **Diana M**, Wall J, Lindner V, Harrison M, Marescaux J An Original Endoluminal Magnetic Anastomotic Device Allowing Pure NOTES Transgastric and Transrectal Sigmoidectomy in a Porcine Model: Proof of Concept. *Surg Innov* 2011 Dec 4
- **Diana M**, Wall J, Costantino F, D'agostino J, Leroy J, Marescaux J Transanal extraction of the specimen during laparoscopic colectomy. *Colorectal Dis* 2011 Nov;13 Suppl 7:23-7
- Mutter D, Callari C, **Diana M**, Bencheikh L, Heibel F, Marescaux J A novel technique to treat hydrothorax in peritoneal dialysis: laparoscopic hepato-diaphragmatic adhesion. *Perit Dial Int*. 2011 Nov-Dec; 31(6):692-4.
- Callari C, Perretta S, **Diana M**, D'agostino J, Dallemagne B, Marescaux J Thoracoscopic management of chylothorax after esophagectomy. *Surg Endosc* 2011 Nov 15
- **Diana M**, Wall J, Perretta S, Dallemagne B, Gonzales KD, Harrison MR, Agnus V, Soler L, Nicolau S,

Marescaux J Totally Endoscopic Magnetic Enteral Bypass by External Guided Rendez-Vous Technique. *Surg Innov* 2011 Jul 7.

- Sojod G, **Diana M**, Wall J, D'Agostino J, Mutter D, Marescaux J Successful extracorporeal membrane oxygenation treatment for pheochromocytoma-induced acute cardiac failure. *Am J Emerg Med* 2011 Jul 7.
- Leroy J, **Diana M**, Perretta S, Wall J, De Ruijter V, Marescaux J Original technique to close the transrectal viscerotomy access in a NOTES transrectal and transgastric segmental colectomy. *Surg Innov* 2011 Sep;18(3):193-200. Epub 2011 Jul 3.
- Leroy J, **Diana M**, Wall J, Costantino F, D'Agostino J, Marescaux J Laparo-endoscopic single-site (LESS) with transanal natural orifice specimen extraction (NOSE) sigmoidectomy: a new step before pure colorectal natural orifices transluminal endoscopic surgery (NOTES®). *J Gastrointest Surg* 2011 Aug;15(8):1488-92. Epub 2011 May 17
- **Diana M**, Perretta S, Wall J, Costantino FA, Leroy J, Demartines N, Marescaux J Transvaginal specimen extraction in colorectal surgery: current state of the art. *Colorectal Dis* 2011 Jun;13(6):e104-11
- Umale S, Chatelin S, Bourdet N, Deck C, **Diana M**, Dhumane P, Soler L, Marescaux J, Willinger R Experimental in vitro mechanical characterization of porcine Glisson's capsule and hepatic veins. *J Biomech* 2011 Jun 3;44(9):1678-83.
- **Diana M**, Dhumane P, Cahill RA, Mortensen N, Leroy J, Marescaux J Minimal invasive single-site surgery in colorectal procedures: Current state of the art. *J Minim Access Surg* 2011 Jan;7(1):52-60.
- Dhumane PW, **Diana M**, Leroy J, Marescaux J Minimally invasive single-site surgery for the digestive system: A technological review. *J Minim Access Surg* 2011 Jan;7(1):40-51
- Mutter D, Callari C, **Diana M**, Dallemagne B, Leroy J, Marescaux J Single port laparoscopic cholecystectomy: which technique, which surgeon, for which patient? A study of the implementation in a teaching hospital. *J Hepatobiliary Pancreat Sci* 2011 May;18(3):453-7.
- Hübner M, **Diana M**, Zanetti G, Eisenring MC, Demartines N, Troillet N Surgical site infections in colon surgery: the patient, the procedure, the hospital, and the surgeon. *Arch Surg* 2011 Nov;146(11):1240-5. Epub 2011 Jul 18
- **Diana M**, Hübner M, Vuilleumier H, Bize P, Denys A, Demartines N, Schäfer M Redistribution of gastric blood flow by embolization of gastric arteries before esophagectomy. *Ann Thorac Surg* 2011 May;91(5):1546-51. Epub 2011 Mar 21.
- **Diana M**, Hübner M, Eisenring MC, Zanetti G, Troillet N, Demartines N Measures to prevent surgical site infections: what surgeons (should) do. *World J Surg* 2011 Feb;35(2):280-8
- **Diana M**, Paroz A, Demartines N, Schäfer M Retroperitoneal abscess with concomitant hepatic portal venous gas and rectal perforation: a rare triad of complications of acute appendicitis. A case report. *World J Emerg Surg* 2010 Jan 28;5:3
- Garbin O, Hummel M, **Diana M**, Wattiez A Solitary fibrous tumor of the great omentum. *J Minim*



*Invasive Gynecol* 2011; 18(6):694-5.

- Forgione A, Capristo E, Miele L, **Diana M**, Mingrone G, Greco AV, Grieco A, Gasbarrini G. Serum Leptine and nutritional status in Non-alcoholic steato-hepatitis. *Ann Int Med* 2003 nov.; 18 suppl. 2,95S
- Piccillo GA, Mondati EGM, Miele L, **Diana M**, Gasbarrini G. About a case of celiac disease associated with microvillus inclusion disease. *Ann Int Med* 2003 nov.; 18 suppl 2, 102S
- Miele L, Capristo E, Forgione A, Vero V, **Diana M**, Mingrone G, Greco AV, Grieco A, Gasbarrini G. Body composition and nutrient utilisation in patients with non-alcoholic steato-hepatitis (NASH) *Digestive and liver disease* 2004 mar.; 36 suppl,2,S164
- Miele L, Valenza V, **Diana M**, Perotti G, Cammarota G, Montalto M, Gabrieli L, Forgione A, Vero V, Mascianà R, Di Giuda D, Gasbarrini G, Grieco A. Intestinal permeability assessed by radiolabelled 51 Cr-EDTA in non-alcoholic fatty liver disease (NAFLD) *Digestive and liver disease* 2004 mar; 36 suppl. 2,S284

#### Book chapters

- **Michele Diana**, Vincent Agnus and Jacques Marescaux  
**Real-time assessment of intestinal perfusion by Fluorescence-based Enhanced Reality.**  
Chapter 31 in: *Concepts and Applications of Fluorescence Imaging for Surgeons.*  
Editors Fernando Dip, Takeaki Ishizawa, Norihiro Kokudo, Raoul Rosenthal. Publisher: Springer International Publishing Switzerland 2015
- **Michele Diana** and Jacques Marescaux  
**New technology in thyroid and parathyroid surgery** in *Textbook of Endocrine Surgery 3<sup>rd</sup> Edition.*  
Editors Orlo H. Clark and Quan-Yang Duh (*in press*)
- **Michele Diana** and Silvana Perretta  
**Laparoscopic and Single-Incision Sleeve Gastrectomy.**  
Chapter 29 in: *Mastery of Endoscopic and Laparoscopic Surgery 4<sup>th</sup> Edition.*  
Editors Nathaniel Soper and Lee Swanstrom. Publisher: Wolters Kluwer Health: Lippincott Williams and Wilkins 2014.
- Joel Leroy, **Michele Diana**, James Wall & Jacques Marescaux  
**NOTES® applications in colorectal surgery.** In *Atlas Textbook in NOTES®* by R Zorron & J Marescaux
- Michel Vix, James Wall, **Michele Diana** & Jacques Marescaux  
**NOTES® applications in bariatric surgery.** In *Atlas Textbook in NOTES®* by R Zorron & J Marescaux
- Bernard Dallemagne, Silvana Perretta, and **Michele Diana**  
**Transgastric Access in Scar-Less Surgery, NOTES, Transumbilical, and Others** by Rane, A.; Cadeddu, J.A.; Desai, M.M.; Gill, I.S. (Eds.) 2012, 2012, XIV
- Jacques Marescaux & **Michele Diana**

**Robotic applications in Gastro Intestinal Surgery** in *Robotic Surgery: applications and advances* by Duc Le Hong Chapter n3 Publisher Future Medicine 2013

- Jacques Marescaux & **Michele Diana**  
**Robotic and remote surgery what's next?** *In Robotics in General Surgery* by Keith Chae Kim (Ed); chapter n37; pp 479-484; Publisher Springer Science + Business Media New York 2014
- Jacques Marescaux & **Michele Diana**  
**From Multiport Laparoscopic Surgery to Single Port Laparoscopic Surgery in G. Pignata et al. (eds.), *Single-Access Laparoscopic Surgery*,**  
DOI 10.1007/978-3-319-06929-6\_1, © Springer International Publishing Switzerland 2014

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### Teaching Experience

- Faculty at the mini-pig surgery Course for the French license to animal experimentation (IRCAD/EITS, Strasbourg, 26-28 april 2010)
  - Faculty at the Natural Orifices Transluminal Endoscopic Surgery course (IRCAD/EITS, Strasbourg, 28-29 may 2010)
  - Faculty at the Laparoscopic General Surgery Course (IRCAD/EITS, Strasbourg, 5-9 july 2010)
  - Faculty at the Metabolic Surgery Course (IRCAD/EITS, Strasbourg, 17-18 september 2010)
  - Faculty at the Laparoscopic General Surgery Course (IRCAD/EITS, Strasbourg, 20-25 september 2010)
  - Faculty at the Natural Orifices Transluminal Endoscopic Surgery course (IRCAD/EITS, Strasbourg, 1-2 Oct 2010)
  - Faculty at the Laparoscopic General Surgery Course (IRCAD/EITS, Strasbourg, 7-11 February 2011)
  - Faculty at the Laparoscopic General Surgery Course (IRCAD/EITS, Strasbourg, 7-11 March 2011)
  - Faculty at the Laparoscopic Digestive Surgery Course (IRCAD/EITS, Strasbourg 14-16 April 2011)
  - Faculty at the Laparoscopic General Surgery Course (IRCAD/EITS, Strasbourg 16-20 May 2011)
  - Faculty at the Laparoscopic Colorectal Surgery Course (IRCAD/EITS, Strasbourg 27-28 May 2011)
  - Faculty at the Laparoscopic General Surgery Course (IRCAD/EITS, Strasbourg 4-8 July 2011)
  - Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 19-23 Sep 2011)
  - Faculty at the mini-pig surgery Course for the French license to animal experimentation (IRCAD/EITS, Strasbourg, 26 Sep 2011)
  - Faculty at the Advanced Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 31 Oct-3 Nov 2011)
  - Faculty at the Laparoscopic Colorectal Surgery Course (IRCAD/EITS, Strasbourg 14-16 Nov 2011)
  - Faculty at the General Surgery Course (IRCAD/EITS, Strasbourg 21-25 Nov 2011)
  - Faculty at the Metabolic Surgery Course (IRCAD/EITS, Strasbourg 6-7 Dec 2011)
  - Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 13-17 Feb 2012)
  - Faculty at the Metabolic Surgery Course (IRCAD/AITS, **Taiwan**, 23-24 Feb 2012)
  - Faculty at the Advanced Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 13-16 Mar 2012)
  - Faculty at the surgery Course for scrub nurses (IRCAD/EITS, Strasbourg 19 Mar 2012)
  - Faculty at the mini-pig surgery Course for the French licence to animal experimentation (IRCAD/EITS, Strasbourg, 16-18 april 2012)
  - Faculty at the Advanced Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 19-21 April 2012)
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- Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 21-25 May 2012)
  - Faculty at the Laparoscopic Colorectal Surgery Course (IRCAD/EITS, Strasbourg 1-2 June 2012)
  - Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 24-26 September 2012)
  - Faculty at the Laparoscopic Surgery and New Technology Course (IRCAD-EITS, Strasbourg 15 October 2012)
  - Faculty at the Advanced Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 25-26 October 2012)
  - Faculty at the Laparoscopic Colorectal Surgery Course (IRCAD/EITS, Strasbourg 16-17 November 2012)
  - Faculty at the Metabolic Surgery Course (IRCAD/EITS, Strasbourg 7-8 December 2012)
  - Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 4-8 February 2013)
  - Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 11-15 March 2013)
  - Faculty at the Hepatobiliary Surgery Course (IRCAD/EITS, Strasbourg 4-6 April 2013)
  - Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 13-17 May 2013)
  - Faculty at the Laparoscopic Colorectal Surgery Course (IRCAD/EITS, Strasbourg 7-8 June 2013)
  - Faculty at the BEST (Business Engineering Surgical Technology) Course (IRCAD, Strasbourg, August 2013)
  - Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 22-26 September 2013)
  - Faculty at the surgery Course for scrub nurses (IRCAD/EITS, Strasbourg 14 October 2013)
  - Faculty at the Laparoscopic Colorectal Surgery Course (IRCAD/EITS, Strasbourg Nov 2013)
  - Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 24-28 January 2014)
  - Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 12-16 May 2014)
  - Faculty at the Laparoscopic Colorectal Surgery Course (IRCAD/EITS, Strasbourg 11-13 June 2014)
  - Faculty at the Masterclass in Hepatobiliary Surgery (IHU-Strasbourg 16-18 June 2014)
  - Faculty at the Hepatobiliary Surgery Course (IRCAD/EITS Strasbourg 19-20 June 2014)
  - Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS Strasbourg 30th June- 4th July 2014)
  - Faculty at the BEST (Business Engineering Surgical Technology) Course (IRCAD, Strasbourg, 7-12 July 2014)
  - Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg, 15-19 September 2014)
  - Faculty at the Digestive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg, 22-25 October 2014)
  - Faculty at the Masterclass in Hepatobiliary Surgery (IHU-Strasbourg 1-3 December 2014)
  - Faculty at the Bariatric Surgery Course (IRCAD, Strasbourg 4-6 December 2014)
  - Faculty at the Laparoscopic Colorectal Surgery Course (IRCAD, Strasbourg 13-15 November 2014)
  - Faculty at the Laparoscopic General Surgery Intensive Course (IRCAD, Strasbourg 17-21 November 2014)
  - Faculty at the University Diploma of Robotic Surgery (**Nancy**, 28 November 2014)
  - Faculty at the Laparoscopic General Surgery Intensive Course (IRCAD, Strasbourg, 26-30 January 2015)
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- Faculty at the University Diploma of Robotic Surgery (**Strasbourg IHU**, 19 March 2015)
  - Faculty at the Laparoscopic General Surgery Intensive Course (IRCAD, Strasbourg 18-22 mai 2015)
  - Faculty at the Laparoscopic Colorectal Surgery Course (IRCAD, Strasbourg, 18-19 june 2015)
  - Faculty at the Laparoscopic General Surgery Intensive Course (IRCAD, Strasbourg 29 june-3 july 2015)
  - Faculty at the BEST (Business Engineering Surgical Technology) Course (IRCAD, Strasbourg, August 2015)
  - Faculty at the Laparoscopic General Surgery Intensive Course (IRCAD, Strasbourg 21-25 September 2015)
  - Faculty at the Hands-on Anesthesiology and Reanimation Course (IRCAD, Strasbourg, 25-26 September 2015)
  - Faculty at the Laparoscopic Digestive Surgery Course (IRCAD, Strasbourg 15-17 October 2015)
  - Faculty at the Masterclass in Hepatobiliary Surgery (IHU-Strasbourg 29-30 October 2015)
  - Faculty at the Laparoscopic Colorectal Surgery Course 6-7 nov 2015
  - Faculty at the Gen Surg Course 16-20 Novembre 2015
  - Faculty at the University Diploma of Robotic Surgery (Nancy, 2015)
  - Faculty at the Master 2 in Surgical Sciences Technology Innovations (Paris, Kremlin Bicêtre, 16.03.2016)
  - Faculty at the mini-pig surgery Course for the French license to animal experimentation (IRCAD/EITS Strasbourg, April 2016)
  - Faculty at the Colorectal Surgery Course (IRCAD/EITS, Strasbourg 18-21 May 2016)
  - Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 23-27 May 2016)
  - Faculty at the Masterclass in Hepatobiliary Surgery (IHU-Strasbourg 20-22 May 2016)
  - Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 4-7 July 2016)
  - Faculty at the University Diploma in Surgical Endoscopy (IHU-Strasbourg 11-13 July 2016)
  - Faculty at the BEST (Business Engineering Surgical Technology) Course (IRCAD, Strasbourg, August 2016)
  - Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg 12-16 September 2016)
  - Faculty at the Hepatobiliary Surgery Course (IRCAD/EITS, Strasbourg 21-24 September 2016)
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**MD Thesis supervisor:**

**1) Dr Luigi Schiraldi**

**Thesis title:**

Functional Capillary Density for in Vivo Estimation of Intestinal Perfusion using Real-Time Confocal Endomicroscopy  
Schiraldi, et al., J Cytol Histol 2015, 6:4 <http://dx.doi.org/10.4172/2157-7099.1000334> (Open access)

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### Post-Graduate Courses

- Basic course in laparoscopic techniques (Geneva 9 mars 2006)
- Basic course on proctology (Geneva, 5-9 February 2007)
- **Advanced Trauma Life Support (ATLS®) course** (Geneva, 7-9 may 2007)
- Basic course in laparoscopic techniques (Lausanne, 14-16 may 2007)
- Advanced course in laparoscopic surgery (Timisoara, 20-22 juin 2007)
- Basic Science Writing Course (Zurich, 4-6 December 2008)
- 26<sup>th</sup> international Gastrointestinal Surgery Workshop (Davos 28 February-6 mars 2009)
- Laparoscopic Digestive Surgery Course (IRCAD/EITS, Strasbourg, 22-24 april 2010)
- Laparoscopic General Surgery Course (IRCAD/EITS, Strasbourg, 17-21 may 2010)
- Colorectal Surgery Course (IRCAD/EITS, Strasbourg, 25-26 june 2010)
- Upper GI endoscopic techniques Course (IRCAD/EITS, Strasbourg, 28-29 june 2010)
- Single Port Surgery Course (IRCAD/EITS, Strasbourg, 1-2 july 2010)
- Laparoscopic digestive surgery course (IRCAD/EITS, Strasbourg, 27-30 Oct 2010)
- Single Port Surgery Course (IRCAD/EITS, Strasbourg, 5 Nov 2010)
- Colorectal Surgery Course (IRCAD/EITS, Strasbourg, 19-20 Nov 2010)
- Laparoscopic General Surgery Course (IRCAD/EITS, Strasbourg 22-23 and 25-26 Nov 2010)
- daVinci® Surgical System Off-Site Training Program for a Console Surgeon (IRCAD/EITS, Strasbourg, 24 Nov 2010)
- Minimal Invasive Endocrine Surgery Course (IRCAD/EITS, Strasbourg 23-25 June 2011)
- Single Port and NOTES Course (IRCAD/EITS, Strasbourg 29 Sep-1 Oct 2011)
- Flexible Endoscopy and Hybrid Endo-Laparoscopic Surgery (IRCAD/EITS) Strasbourg 19-20 October 2012)
- Advanced course of Surgical Endoscopy (IRCAD/EITS, Strasbourg, 19-20 November 2012)
- Hands-on-course in **Micro-surgery** (Surgery School Fer à Moulin, Paris, September 2014)
- Workshop on Molecular Guided Surgery (New York, September 2016)
- 8<sup>th</sup> Convention of Health Analysis and Management (Chamonix, 30 September 2016)

## Professional Memberships

### Active memberships

- **2016** Value-based Healthcare French Circle
- **2015** Society for Medical Innovation and Technology (SMIT)
  - Member of the Steering Committee (2016)
- **2015** Society of American Gastrointestinal and Endoscopic Surgeons (SAGES)
- **2015** European Association of Endoscopic Surgeons (EAES)
  - Member of the Technology Committee (2016)
- **2013 Founder member** of the International Society for Fluorescence Guided Surgery
- **2013** International Society for Computer Aided Surgery (ISCAS)
- **2004** Italian College of Physicians and Surgeons

### Past memberships

- **2013-2014** Academy of Surgical Research (ASR)
- **2012-2014** Swiss Society of Biomedical Engineering (SSBE)
- **2010-2014** Association for Academic Surgery and Perioperative Medicine (AASPM)
- **2010-2014** International Society of Surgery (ISS/SIC)
- **2009-2014** Swiss Society of Surgery (SSC)
- **2006-2014** Swiss College of Physicians (Foederatio Medicorum Helveticorum (FMH))

## Editorial activities

- Associate Editor and Co-founder of the Journal of Fluorescence-Guided Surgery
- Reviewer for the several journals, including:

- 1) Surgical Innovation
- 2) Surgical Endoscopy
- 3) Journal of Pediatric Surgery
- 4) Gastroenterology
- 5) International Journal of Computer Assisted Radiology and Surgery

## Patents

- 1) **Modular Magnetic Anastomotic Device**
- 2) **Applicators for Modular Magnetic Anastomotic Device**
- 3) **Implantable vibrating system to counteract gastric pacemaker**
- 4) **System to detect anastomotic leaks based on NO detection**

## Conferences: Posters or Oral Presentations

### 2016

- Invited Speaker at the Third International Conference on Fluorescence Guided Surgery (during the 15<sup>th</sup> Foregut Symposium of Cleveland Clinic) Boca Raton Convention Center, Florida (**February 4, 2016**)

Presentation title

- 1) **Why should we use near-infrared guidance?**
- 2) **Alternative routes of administration of Indocyanine Green**

- Invited Speaker at Surgical Horizons Seminar Series at Harvard Medical School, Boston, Massachusetts (**February 8, 2016**)

Presentation title

**Perspectives on Surgical Guidance Using Near-Infrared Light**

- Invited Speaker and Chairman at SPIE PHOTONICS, Moscone Center San Francisco February 14 2016

Presentation title

**Fluorescence-based Enhanced Reality to assess bowel perfusion**

- Society of American Gastrointestinal Endoscopic Surgeons (SAGES), Boston, Massachusetts, USA (**March 16-18, 2016**)

Poster presentation title

**Superselective intra-arterial hepatic injection of Indocyanine Green (ICG) for fluorescence image-guided segmental positive staining: experimental proof of the concept.**

Michele Diana<sup>1,2</sup>, MD, PhD\*; Yu-Yin Liu<sup>1,3</sup>, MD\*; Raoul Pop<sup>4</sup>, MD; Seong-Ho Kong<sup>2,5</sup>, MD, PhD; Andras Legnèr<sup>2</sup>, MD; Remy Beaujeux<sup>4</sup>, MD, PhD; Patrick Pessaux<sup>6</sup>, MD, PhD; Luc Soler<sup>1,2</sup>, PhD; Didier Mutter<sup>6</sup>, MD, PhD, FACS; Bernard Dallemagne<sup>1</sup>, MD; Jacques Marescaux<sup>1,2</sup>, MD, FACS, (Hon) FRCS, (Hon) FJSES, (Hon) APSA.

Oral presentation title

**Robust Augmented Reality registration method for Localization of Solid Organs' Tumors Using CT-derived Virtual Biomechanical Model and Fluorescent Fiducials**

Seong-Ho Kong (IHU & Seoul National University Hospital); Nazim Haouchine (INRIA & IHU); Renato Soares (IHU); Bruno Marques (INRIA and IHU); Michele Diana (IHU & IRCAD); Galyna Shabat (IRCAD); Bohdan Andreiuk (Faculté de Pharmacie, Université de Strasbourg); Andrey Klymchenko (Faculté de Pharmacie, Université de Strasbourg); Thierry Piechaud (Clinique Saint-Augustin, Bordeaux), Stephane Cotin (INRIA Mimesis & IHU); Jacques Marescaux (IRCAD & IHU)

- Invited Speaker at the Innovation Club of the French Association of Hepatobiliary Pancreatic Surgery and Transplantation: “Open brain and fresh air in surgery” (**June 3-5, 2016**)

Presentation title

**The use of light in surgery**

- Keynote speaker at the conference on “Simulation in the training of medical professions”. University “Gabriele D’Annunzio”, Chieti, Italy (**June 13, 2016**)

Presentation title:

### **THE CYBERSURGERY**

- **European Association of Endoscopic Surgeons (EAES), Amsterdam, The Netherlands, (15-18 June 2016**

**Chairman and organizer of the session on FLUORESCENCE-GUIDED SURGERY**

### **Oral Presentations**

**Presentation of the EURO-FIGS REGISTRY (A web-based registry powered by the IHU-SPECTRA unit) dedicated to the collection of patients operated using Fluorescence guidance across Europe.**

**Precision real-time evaluation of bowel perfusion. Accuracy of confocal endomicroscopy assessment of stoma in a controlled hemorrhagic shock model**

**Michele Diana<sup>1,3,4</sup>, MD, PhD** Eric Noll<sup>2,3</sup>, MD; Anne-Laure Charles<sup>3</sup>, PhD; Pierre Diemunsch<sup>2,3</sup>, MD, PhD; Bernard Geny<sup>3</sup>, MD, PhD; Yu-Yin Liu<sup>4,5</sup>, MD; Francesco Marchegiani<sup>4</sup>, MD; Luigi Schiraldi<sup>4</sup>, MD; Vincent Agnus<sup>4</sup>, PhD; Veronique Lindner<sup>6</sup>, MD, PhD; Lee Swanström<sup>1</sup>, MD, FACS; Bernard Dallemagne<sup>4</sup>, MD; Jacques Marescaux<sup>1,4</sup>, MD, FACS, (Hon) FRCS, (Hon) FJSES, (Hon) APSA.

**Precision computer-assisted Barrett Esophagus follow-up. Relocalization of previous biopsy sites with electromagnetic tracking and time-machine patient-specific video archive**

Stephane Nicolau<sup>1</sup> PhD, **Michele Diana**<sup>1,2</sup> **MD, PhD** Adrien Sportes<sup>3</sup> MD, Michel Delvaux<sup>3</sup> MD, Luc Soler<sup>1</sup> PhD, Anant Vemuri<sup>1</sup> PhD, Jacques Marescaux<sup>1,2</sup> MD, FACS, (Hon) FRCS, (Hon) FJSES, (Hon) APSA

**Impact of valve-less vs. standard insufflation on pneumoperitoneum volume, inflammation and peritoneal physiology in a laparoscopic sigmoid resection experimental model**

**Michele Diana**<sup>1,2,4</sup> **MD, PhD**; Eric Noll<sup>3</sup> MD, Andras Legnèr<sup>2</sup> MD, Seong-Ho Kong<sup>2</sup> MD, Yu-Yin Liu<sup>1</sup> MD, Luigi Schiraldi<sup>1</sup> MD, Francesco Marchegiani<sup>1</sup> MD, Bernard Geny<sup>4</sup> MD, PhD, Anne-Laure Charles<sup>4</sup> PhD, Bernard Dallemagne<sup>1</sup> MD, Véronique Lindner<sup>5</sup> MD, PhD, Pierre Diemunsch<sup>3</sup> MD, PhD, Jacques Marescaux<sup>1,2</sup> MD, FACS, (Hon) FRCS, (Hon) FJSES, (Hon) APSA

**Augmented Reality computer-assisted navigation in hybrid interventional therapies: transparency visualization of patient-specific virtual organs motion during breathing using real-time skin tracking.**

**Hostettler Alexandre**<sup>1</sup> **PhD**, Stephane Nicolau<sup>1</sup> PhD, Michele Diana<sup>1,2</sup> MD, Luc Soler<sup>1</sup> PhD, Jacques Marescaux<sup>1,2</sup> MD, FACS, (Hon) FRCS, (Hon) FJSES, (Hon) APSA

**3D MRI Topography of the Nerves at Risk during Pelvic Visceral Surgery**



**AR Wijsmuller**, C Giraudeau, GJ Kleinrensink, E Rociu, M Diana, J Leroy, J Marescaux, D Mutter

- **Keynote Speaker at the Sociedad Iberico-Americana de Intervencionismo 8-9 September 2016, Zaragoza**

Presentation title: “Bariatric Embolization”

- **French Association of Surgery (AFC), annual meeting, Paris 28.09.2016**

Presentation title: “Fluorescence-guided surgery: The cybernetic eye for precision surgery”

## 2015

- Invited Speaker at the Second International Conference on Fluorescence Guided Surgery (during the 14<sup>th</sup> Foregut Symposium of Cleveland Clinic) Biltimore Hotel, Coral Gables Miami, Florida (February 14-16, 2015)

Presentation title:

**1) FLUORESCENCE ENHANCED REALITY TO ASSESS ANASTOMOTIC PERFUSION**

**2) FLUORESCENCE-BASED AUGMENTED REALITY INTRA-OPERATIVE CHOLANGIOGRAPHY: RESULTS OF A PROSPECTIVE CLINICAL TRIAL**

- Society of American Gastrointestinal Endoscopic Surgeons (SAGES), Nashville, Tennessee, USA (April 15-18, 2015)

Presentation title:

**HIGH INTENSITY FOCUSED ULTRASOUND (HIFU) FOR SUBMUCOSAL GASTROINTESTINAL TISSUE ABLATION.**

- European Association of Endoscopic Surgeons (EAES), Bucharest, Romania (3-6 June 2015)

Presentations title:

**1) INTRAOPERATIVE IMMUNOHISTOCHEMISTRY: TISSUE-SPECIFIC FLUORESCENT PROBES FOR REAL-TIME SENTINEL NODE EVALUATION USING CONFOCAL ENDOMICROSCOPY.**

**2) NOVEL LAPAROSCOPIC NARROW BANDING IMAGING FOR REAL-TIME DETECTION OF BILE LEAK DURING HEPATECTOMY. PROOF OF THE CONCEPT IN A PORCINE MODEL.**

- Keynote speaker at the meeting of the Ukranian Society of Surgical Oncology, Kiev, Ukraine (11 June 2015)

Presentations title:

**HYBRID NAVIGATION IN SURGERY**

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- Keynote speaker at the iMed 7.0 Lisbon, Portugal (18 September 2015)

Presentations title:

**MINIMALLY INVASIVE SURGERY 2.0**

- Keynote speaker at the Conference of the Italian Society of Colorectal Surgery, Treviso, Italy (5 October 2015)

Presentations title:

**NEXT STEPS IN MINIMALLY INVASIVE SURGERY: HYBRID IMAGE-GUIDED SURGERY**

**2014**

- Invited Speaker at the First World Conference on Fluorescence Guided Surgery (during the 13<sup>th</sup> Foregut Symposium of Cleveland Clinic) Biltmore Hotel, Coral Gables Miami Florida February 15-16, 2014
- Society of American Gastrointestinal Endoscopic Surgeons (SAGES), April 2-5, 2014 Salt Lake City, Utah, USA

**REAL-TIME NAVIGATION BY FLUORESCENCE-BASED ENHANCED REALITY FOR PRECISE ESTIMATION OF FUTURE ANASTOMOTIC SITE IN DIGESTIVE SURGERY.**

**Diana M**, Halvax P, Dallemagne B, Nagao Y, Diemunsch P, Charles AL, Agnus V, Soler L, Demartines N, Lindner V, Geny B, **Marescaux J**.

**PROBE-BASED CONFOCAL LASER ENDOMICROSCOPY AND FLUORESCENCE-BASED ENHANCED REALITY FOR REAL-TIME ASSESSMENT OF INTESTINAL MICROCIRCULATION IN A PORCINE MODEL OF SIGMOID ISCHEMIA.**

**Diana M**, Dallemagne B, Chung H, Nagao Y, Halvax P, Agnus V, Soler L, Lindner V, Demartines N, Diemunsch P, Geny B, Swanström L, **Marescaux J**

- European Association of Endoscopic Surgeons (EAES), June Paris 2014

**ENDOSCOPIC FULL THICKNESS SUTURING WITH AN ENDOSCOPIC SUTURING DEVICE ON PORCINE SIGMOID COLON**

P. Halvax, L. Swanström, **M. Diana**, S. Perretta, A. Legner, Y.Y. Liu, S. Cho, A. Alzaga, J. Marescaux

**ENDOLUMINAL FULL-THICKNESS SUTURE REPAIR OF GASTROTOMY: A SURVIVAL STUDY**

P. Halvax; LL. Swanström; **M. Diana**; S. Perretta; S. Cho; YY. Liu; Y. Nagao; J. Marescaux

- Academy for Surgical Research, Minneapolis 18-21 September 2014

## **IMPROVING ECHO-GUIDED PROCEDURES USING A 4D ULTRASOUND WITH IMAGE FUSION SYSTEM**

Michele Diana, Peter Halvax; Damien Mertz, Andras Legner, Jean-Marcel Brulé, Eric Robinet, Didier Mutter, Patrick Pessaux; Jacques Marescaux

- UEGW Vienna, 18-22 October 2014

## **ESOPHAGEAL COVERED STENT FIXATION USING AN ENDOSCOPIC OVER-THE-SCOPE CLIP. MECHANICAL PROOF OF THE CONCEPT AND FIRST CLINICAL EXPERIENCE.**

**Diana M**, Swanström LL, Halvax P, Lègner A, Liu YY, Alzaga A, D'Urso A, Marescaux J.

## **2013**

- Society of American Gastrointestinal Endoscopic Surgeons (SAGES) April 16 –20, 2013 Baltimore, MD, USA

## **AGE INFLUENCE ON WEIGHT LOSS AND GLYCOL-LIPID PROFILE AFTER LAPAROSCOPIC SLEEVE GASTRECTOMY: EXPERIENCE WITH 308 CONSECUTIVE PATIENTS.**

Yoshi Nagao, MD, PhD; **Michele Diana**, MD; Michel Vix, MD; Antonio D'Urso, MD; Didier Mutter, MD, PhD, FACS; Jacques Marescaux, MD, (Hon) FRCS, FACS, (Hon) FJSES

- **REVISIONAL SURGERY AFTER FAILED ADJUSTABLE GASTRIC BANDING: INSTITUTIONAL EXPERIENCE WITH 90 CONSECUTIVE CASES.**

Keng-Hao Liu<sup>1,2</sup>, MD, **Michele Diana**<sup>1</sup>, MD, Michel Vix<sup>1</sup>, MD, Didier Mutter<sup>1</sup>, MD, PhD, FACS; Jacques Marescaux<sup>1</sup>, MD, FACS, (Hon) FRCS, (Hon) FJSES

International Anaesthesia Research Society (IARS)  
May 5 –8, 2013 San Diego, CA, USA

- **INSTANT CAPILLARY LACTATES TO EVALUATE BOWEL ISCHEMIA: PROOF OF CONCEPT IN A PORCINE MODEL**

**Michele Diana**<sup>1-3</sup> MD; Eric Noll<sup>2</sup> MD; Pierre Diemunsch<sup>2</sup> MD, PhD; Peter Halvax<sup>1</sup> MD; Bernard Dallemagne<sup>1</sup> MD; Nicolas Demartines<sup>3</sup> MD, FACS; Jacques Marescaux<sup>1</sup> MD, FACS, (Hon) FRCS, (Hon) FJSES

- **OXYGRAPHIC ASSESSMENT OF MITOCHONDRIA RESPIRATORY RATE KINETICS IN A PORCINE MODEL OF SMALL BOWEL ISCHEMIA**

**Michele Diana**<sup>1-4</sup> MD; Anne-Laure Charles<sup>3</sup> MD, PhD; Yoshihiro Nagao<sup>1</sup> MD; Hyunsoo Chung<sup>1</sup> MD; Bernard Geny<sup>3</sup> MD, PhD; Nicolas Demartines<sup>4</sup> MD, FACS, FRCS; Jacques Marescaux<sup>1</sup> MD, FACS, (Hon) FRCS, (Hon) FJSES

Swiss Society of Surgery annual meeting 12 June, 2013 Berne Switzerland

- **INSTANT CAPILLARY LACTATES TO EVALUATE BOWEL ISCHEMIA: PROOF OF CONCEPT IN A PORCINE MODEL**

**Michele Diana**<sup>1-3</sup> MD; Eric Noll<sup>2</sup> MD; Pierre Diemunsch<sup>2</sup> MD, PhD; Peter Halvax<sup>1</sup> MD; Bernard Dallemagne<sup>1</sup> MD; Nicolas Demartines<sup>3</sup> MD, FACS; Jacques Marescaux<sup>1</sup> MD, FACS,

(Hon) FRCS, (Hon) FJSES

European Association for Endoscopic Surgery (EAES) 19-22 June , 2013 Vienna, Austria

- **ENDOLUMINAL SURGICAL TRIANGULATION: OVERCOMING CHALLENGES OF COLONIC ENDOSCOPIC SUBMUCOSAL DISSECTIONS USING A NOVEL FLEXIBLE ENDOSCOPIC SURGICAL PLATFORM. FEASIBILITY STUDY IN A PORCINE MODEL (WITH VIDEO).**  
**Michele Diana<sup>1-2</sup> MD;** Hyunsoo Chung<sup>1</sup> MD; Keng-Hao Liu<sup>1</sup> MD; Bernard Dallemagne<sup>1</sup> MD; Didier Mutter<sup>1</sup> MD, PhD, FACS; Nicolas Demartines<sup>2</sup> MD, FACS, FRCS; Jacques Marescaux<sup>1</sup> MD, FACS, (Hon) FRCS, (Hon) FJSES
  - **IRON METABOLISM AFTER ROUX-EN-Y GASTRIC BYPASS OR SLEEVE GASTRECTOMY. RESULTS FROM A PROSPECTIVE RANDOMIZED CLINICAL TRIAL.**  
 Michel Vix, MD; Antonio D'Urso; MD; **Michele Diana**; MD; Keng-Hao Liu, MD; Didier Mutter, MD, PhD, FACS; Jacques Marescaux MD, FACS, (Hon) FRCS, (Hon) FJSES
  - **A MODULAR MAGNETIC ANASTOMOTIC DEVICE FOR MINIMALLY INVASIVE DIGESTIVE ANASTOMOSIS. PROOF OF CONCEPT AND PRELIMINARY DATA IN THE PIG MODEL.**  
**Michele Diana<sup>1-3</sup> MD** ; Didier Mutter<sup>1</sup> MD, PhD; FACS, Véronique Lindner<sup>2</sup> MD, PhD; Hyunsoo Chung<sup>1</sup> MD; Nicolas Demartines<sup>3</sup> MD, FACS, FRCS; Jacques Marescaux<sup>1</sup> MD, FACS, (Hon) FRCS, (Hon) FJSES.
  - **IMPACT OF ROUX-EN Y GASTRIC BYPASS VS. SLEEVE GASTRECTOMY ON VITAMIN D METABOLISM: SHORT TERM RESULTS FROM A PROSPECTIVE RANDOMIZED CLINICAL TRIAL**  
 Michel Vix<sup>1</sup> MD; Keng-Hao Liu<sup>1</sup> MD; **Michele Diana<sup>1</sup> MD**; Antonio D'Urso<sup>1</sup> MD; Didier Mutter<sup>1</sup> MD, PhD, FACS; Hurng-Sheng Wu<sup>2</sup> MD; Jacques Marescaux<sup>1</sup> MD, FACS, (Hon) FRCS, (Hon) JSES
  - **FEASIBILITY AND RELIABILITY OF PANCREATIC CANCER STAGING USING A NEW CONFOCAL NON FLUORESCENCE MICROSCOPY PROBE: A DOUBLE BLIND STUDY IN RATS**  
V.E. De Ruijter, S. Perretta, B. Dallemagne, M. Aprahamian, M. Ignat, V. Lindner, **M. Diana**, J. Marescaux, France
- Computer Assisted Radiology and Surgery (CARS) 26-29 June , 2013 Heidelberg, Germany
- **AUTOMATED AUGMENTED REALITY FOR LAPAROSCOPIC SURGERY**  
 Nicolau S, **Diana M**, Agnus V, Soler L, Marescaux J

**2012**

Society of American Gastrointestinal Endoscopic Surgeons (SAGES)  
March 7 – 10, 2012 San Diego Convention Center, CA, USA

- **MANAGEMENT OF STAPLE LINE LEAKS AFTER SLEEVE GASTRECTOMY IN A**

### CONSECUTIVE SERIES OF 378 PATIENTS

Michel Vix; **Michele Diana**; Ludovic Marx; Cosimo Callari; Jacopo D'Agostino; Gianfranco Donatelli; Silvana Perretta; Hurng-Sheng Wu; Didier Mutter; Jacques Marescaux

○ **GLOBALIZATION OF UNDERGRADUATE SURGICAL EDUCATION: A UNIQUE EDUCATIONAL EXPERIENCE AT THE IRCAD FRANCE**

Vivian De Ruijter; **Michele Diana**; Silvana Perretta; Luc Soler; James Wall; Susana Maia; Joël Leroy; Thomas Parent; Didier Mutter; Bernard Dallemagne, Jacques Marescaux

Swiss Society of Biomedical Engineering Annual meeting (SSBE)  
27-28 August Lausanne, Federal Polytechnic School, Switzerland

○ **FLUORESCENCE BASED AUGMENTED REALITY TO ASSESS INTESTINAL PERFUSION**

**Michele Diana**; Eric Noll; Diemunch Pierre; Bernard Dallemagne; Malika A. Benahmed; Vincent Agnus; Luc Soler; Brian Barry; Izzie Jacques Namer; Nicolas Demartines; Anne-Laure Charles; Bernard Geny; Jacques Marescaux

Austrian Single Incision Symposium, Salzburg 27-29 September (guest speaker)

○ **Keynote lecture on: Technical Innovations in Minimally Invasive Surgery**

UEGW Amsterdam October 20-24

▪ **A NOVEL STEERABLE GRASPER TO FACILITATE GASTRIC ENDOSCOPIC SUBMUCOSAL DISSECTION (ESD): A RANDOMIZED COMPARATIVE STUDY IN A PORCINE MODEL.**

Hyunsoo Chung MD; **Michele Diana MD**; Keng-Hao Liu MD; Theodoros Katsichtis MD; Bernard Dallemagne MD; Jacques Marescaux MD, FACS, (Hon) FRCS, (Hon) JSES

## 2011

Society of American Gastrointestinal Endoscopic Surgeons (SAGES)  
March 30 - April 2, 2011 San Antonio Convention Center, San Antonio, TX

○ **PROSPECTIVE EVALUATION OF PERITONEAL FLUID CONTAMINATION FOLLOWING TRANSABDOMINAL VS. TRANSANAL SPECIMEN EXTRACTION IN LAPAROSCOPIC LEFT-SIDED COLORECTAL RESECTIONS**

Federico A. Costantino, **Michele Diana**, Joel Leroy, Didier Mutter, Jacques Marescaux

IEEE International Conference on Robotics and Automation (ICRA 2011) Shanghai, Chine,  
May 2011

○ **GYROLOCK – FIRST IN VIVO EXPERIMENTS OF ACTIVE HEART STABILIZATION USING CONTROL MOMENT GYRO (CMG)**

J. Gagne, O. Piccin, E. Laroche, **M. Diana**, J. Gangloff

UEGW 2011 Stockholm, 20-25 October

○ **TRANSRECTAL VISCEROTOMY CLOSURE USING TRANSANAL ENDOSCOPIC**

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**SUTURE VS. CIRCULAR STAPLER: A STEP TOWARD NOTES®**

**Michele Diana**, Joël Leroy, James Wall, Vivian DeRuijters, Veronique Lindner, Jacques Marescaux

- **MAGNAMOSIS IV: MAGNETIC COMPRESSION ANASTOMOSIS FOR MINIMALLY INVASIVE COLORECTAL SURGERY**

J. Wall, **M. Diana**, J. Leroy, V. DeRuijter, KD. Gonzales, V. Lindner, M. Harrison, J. Marescaux

21<sup>st</sup> EECMID 7-10 May Milan

- **THE SURGEON AS AN INDEPENDENT RISK FACTOR FOR SURGICAL SITE INFECTIONS**

Martin Hübner, MD,\* **Michele Diana, MD**,\* Giorgio Zanetti, MD, MSc,† Marie-Christine Eisenring, RN, CIC,‡ Nicolas Demartines, MD,\* and Nicolas Troillet, MD, MSc,†‡

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**2010**

Swiss Society of Hospital Hygiene 2-4 Sept 2010 Lausanne

- **THE SURGEONS' IMPACT ON SURGICAL SITE INFECTIONS IN COLON SURGERY. WHAT SURGEONS (SHOULD) DO.**

**Michele Diana**<sup>1</sup>, Martin Hübner<sup>1</sup>, Marie-Christine Eisenring<sup>2</sup>, Giorgio Zanetti<sup>3</sup>, Nicolas Troillet<sup>2,3</sup> Nicolas Demartines<sup>1</sup>

Swiss Society of Surgery annual meeting Interlaken 2010

- **MEASURES TO PREVENT SURGICAL SITE INFECTIONS**

**Michele Diana**, Martin Hübner<sup>1</sup>, Marie-Christine Eisenring<sup>2</sup>, Giorgio Zanetti<sup>3</sup>, Nicolas Troillet<sup>2,3</sup> Nicolas Demartines<sup>1</sup>

- **IMPACT OF PREOPERATIVE ARTERIAL EMBOLIZATION ON ANASTOMOTIC LEAKAGE AND OVERALL COMPLICATIONS AFTER ESOPHAGEAL RESECTION.**

**M Diana**, M Hübner, P. Bize\*, H. Vuilleumier, M Schäfer, N. Demartines

UEGW 2010 Barcelona

- **IMPACT OF PREOPERATIVE ARTERIAL EMBOLIZATION ON ANASTOMOTIC LEAKAGE AND OVERALL COMPLICATIONS AFTER ESOPHAGEAL RESECTION.**

**M Diana**, M Hübner, P. Bize\*, H. Vuilleumier, M Schäfer, N. Demartines

Surgical Innovations Conference, November 13, 2010, Bastrop, Texas.

- **TOTALLY ENDOSCOPIC MAGNETIC ENTERAL BYPASS BY EXTERNAL GUIDED RENDEZ-VOUS TECHNIQUE**

**Michele Diana**, James Wall, Silvana Perretta, Bernard Dallemagne, Kelly D. Gonzales, Michael R. Harrison, Vincent Agnus, Luc Soler, Stephan Nicolau, Jacques Marescaux.

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- **3° Congress of the European chapter of the American College of nutrition, Gottingen November 2003**  
Miele L, Forgione A, Hernandez Ap, Caminiti G, Capristo E, Vero V, Gabrieli L, **Diana M**, Rapaccini GL, Grieco A, Gasbarrini G.  
Prevalence of essential hypertension and metabolic syndrome in “lean” NAFLD patients.
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### Languages

- Italian (native)
- English (expert)
- French (expert)

### Awards & Grants

- European Association of Endoscopic Surgeons (EAES) 2016 Research Grant (50k)
- Research Grant Feasibility Study IHU: EMBARGO 2.0 (50k)
- Research Grant MILTA TECHNOLOGIES (15k)
- Research Grant (30k €) to develop Fluorescence-based Augmented Reality applied to the digestive system (KarlStorz®, Tuttlingen, Germany)
- Research Grant Feasibility Study IHU-Strasbourg: EMBARGO (50k€)
- Research Grant Feasibility Study IHU-Strasbourg: FURTHER (50k€)
- Research Grant Feasibility Study IHU-Strasbourg: GAMMA (50k€)
- Finalist as best medical abstract at the IEEE International Conference on Robotics and Automation ICRA 2011, Shanghai, China (9-13 mai 2011)
- UEGW travel grant 2014 Vienna
- UEGW travel grant 2011 Stockholm
- EECMID travel grant 2011 Milan
- Best innovation paper award EAES 2013 Vienna