

CURRICULUM VITAE

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Languages: Italian (native); English (expert); French (expert)

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Education

Degree	Institution	Year
Venia Legendi (HDR, French Diploma enabling to supervise research)	Doctoral School Life and Health, University of Strasbourg, France Thesis: Endoscopic Luminescent Imaging for Precision Oncology Surgery: the ELIOS project	2017
Ph.D in Medical Sciences	Doctoral School Life and Health, University of Strasbourg, France Thesis: Fluorescence-based Enhanced Reality for real-time evaluation of visceral perfusion (grade: very good and jury congratulations)	2016
Certificate for Animal Experimentation (Level 1, Responsible for Research Projects)	Practical School of High Studies, Sorbonne University (Paris) and Medical School of Dijon (France)	2013
University Diploma in Biomedical Engineering	Pierre & Marie Curie University, Paris (France) Thesis: Concept, design and development of a novel minimal invasive magnetic anastomotic device (grade: very good)	2011
Medical Degree (MD)	Catholic University of the Sacred Heart, Rome (Italy) Thesis: The role of impaired intestinal permeability and resident microbiota overgrowth in the passage from Non-Alcoholic Steatosis to Non-Alcoholic Steatohepatitis (grade: SUMMA CUM LAUDE; 110/110 and jury congratulations)	2003
High School Degree specializing in classical studies	High School Casamary's abbey (Score: 60/60)	1995

Current positions and professional experience

Position	Affiliation	Dates
Associate Professor (Teaching classes on Image-Guided Surgery) at the Surgical Specialty School (MED/18/)	University "Gabriele D'Annunzio" Chieti-Pescara, Italy	February 2018 – to date
Founder and Director of the IHU-SPECTRA unit (Integrated HUB for Shining Perioperative Endoscopic TheRAnostics) http://www.ihu-strasbourg.eu/ihu/en/innovation/translational-rd/research-teams/	IHU-Strasbourg, Institute of Image-Guided Surgery, Strasbourg, France	January 2017 - to date
Director of the Research Unit on Endo-laparoscopic Procedures. Coordinator of the fellowship programs	IHU-Strasbourg, Institute of Image-Guided Surgery, Strasbourg, France	November 2014 - to date

	Head: Professor Jacques Marescaux	
Senior Surgical Researcher at the IRCAD, Research Institute against the Cancer of the Digestive System, Strasbourg, France	Research Institute Against Digestive System Cancer (IRCAD), Strasbourg, France Head: Professor Jacques Marescaux	July 2013 - to date
Staff Researcher	Physiology Institute, EA3072, Mitochondria and oxidative stress, University Louis Pasteur, Strasbourg, France Head of the lab: Professor Bernard Geny	July 2012 - to date
Associate Practitioner	Department of General, Endocrine and Digestive Surgery, Nouvel Hôpital Civil, University Hospital of Strasbourg, France Head: Professor Didier Mutter	June 2017 - to date
IHU Biodesign program coordinator (I-SIP, IHU-School of Innovation Program), supervised by Prof Lee Swanström	IHU-Strasbourg, Institute of Image-Guided Surgery, Strasbourg, France.	October 2012 - July 2013
Research Fellow in Minimally Invasive Surgery (Sponsored by CHUV, University Hospital of Lausanne, Switzerland)	-Research Institute Against Digestive System Cancer (IRCAD), Strasbourg, France -Department of General, Endocrine and Digestive Surgery, Nouvel Hôpital Civil, University Hospital of Strasbourg, France Head: Professor Jacques Marescaux	April 2010 - October 2012
Resident in General, Emergency and Digestive Surgery Clinical rotations in: <ul style="list-style-type: none"> ▪ Intensive Care Unit (6 months) ▪ Emergency Department (1 year) ▪ Orthopaedics and Traumatology Department (6 months) ▪ Visceral Surgery Department (18 months) 	Department of General and Digestive Surgery, University Hospital of Lausanne, Switzerland (Head of the Department: Professor Nicolas Demartines)	October 2006 - March 2010
Resident in Emergency Surgery (6 months)	Department of Surgery, Central Institute of the Valais Hospitals, Sion, Switzerland. Head: Professor Pierre-François Coenoud	April 2006 - October 2006
Resident in General surgery (12 months)	Department of Surgery, Regional Hospital of Neuchâtel, Neuchâtel, Switzerland. Head: Dr. Rémy Schneider	April 2005 - March 2006
Residency in General surgery (6 months)	Department of General and Emergency Surgery, Catholic University of the Sacred Heart,	July 2004- January 2005

	Rome, Italy. Head: Professor Giovanni-Battista Doglietto. Supervisor: Professor Daniele Gui	
Internship in Internal Medicine	Department of Internal Medicine and Hepatology, Catholic University of the Sacred Heart, Rome, Italy. Head: Professor Giovanni-Battista Gasbarrini. Supervisor: Professor Antonio Grieco	2002-2004
Internship in Gastroenterology	Department of Gastroenterology and Endoscopy. Catholic University of the Sacred Heart, Rome, Italy. Head: Professor Giovanni-Battista Gasbarrini. Supervisor Professor Giuseppe Fedeli	2001-2002
Internship in Pathology	Department of Anatomical Pathology. Catholic University of the Sacred Heart, Rome, Italy. Head: Professor Arnaldo Capelli. Supervisor Professor Libero Lauriola	2000-2001

Post-Graduate Courses (selected)

1. 3M course on immobilization techniques (Leysin, 27-29 October 2005)
2. Basic course in laparoscopic techniques (Geneva, 9 mars 2006)
3. Basic course on proctology (Geneva, 5-9 February 2007)
4. **Advanced Trauma Life Support (ATLS®) course** (Geneva, 7-9 may 2007)
5. Basic course in laparoscopic techniques (Lausanne, 14-16 may 2007)
6. Advanced course in laparoscopic surgery (Timisoara, 20-22 June 2007)
7. Basic Science Writing Course (Zurich, 4-6 December 2008)
8. **26th international Gastrointestinal Surgery Workshop (Davos 28 February-6 mars 2009)**
9. Laparoscopic Digestive Surgery Course (IRCAD/EITS, Strasbourg, 22-24 April 2010)
10. Laparoscopic General Surgery Course (IRCAD/EITS, Strasbourg, 17-21 may 2010)
11. Colorectal Surgery Course (IRCAD/EITS, Strasbourg, 25-26 June 2010)
12. Upper GI endoscopic techniques Course (IRCAD/EITS, Strasbourg, 28-29 June 2010)
13. Single Port Surgery Course (IRCAD/EITS, Strasbourg, 1-2 July 2010)
14. Laparoscopic digestive surgery course (IRCAD/EITS, Strasbourg, 27-30 Oct 2010)
15. Single Port Surgery Course (IRCAD/EITS, Strasbourg, 5 Nov 2010)
16. Colorectal Surgery Course (IRCAD/EITS, Strasbourg, 19-20 Nov 2010)
17. Laparoscopic General Surgery Course (IRCAD/EITS, Strasbourg 22-26 Nov 2010)
18. DaVinci® Surgical System Off-Site Training Program for a Console Surgeon (IRCAD/EITS, Strasbourg, 24 Nov 2010)
19. Minimal Invasive Endocrine Surgery Course (IRCAD/EITS, Strasbourg 23-25 June 2011)
20. Single Port and NOTES Course (IRCAD/EITS, Strasbourg 29 Sep-1 Oct 2011)
21. Flexible Endoscopy and Hybrid Endo-Laparoscopic Surgery (IRCAD/EITS) Strasbourg 19-20 October 2012)
22. Advanced course of Surgical Endoscopy (IRCAD/EITS, Strasbourg, 19-20 November 2012)
23. **Hands-on-course in Micro-surgery** (Surgery School Fer à Moulin, Paris, September 2014)
24. Workshop on Molecular Guided Surgery (New York, September 2016)
25. 8th Convention of Health Analysis and Management (Chamonix, 30 September 2016)
26. 3rd Radiosurgery Masterclass organized by the Radiosurgery Institute of Paris (Centre Hartmann) and by the IRCAD-Strasbourg (Strasbourg, 15-17 March, 2018)
27. Shifting to Value-based Healthcare: from theory to practice (Palais d'Iéna, Siège du Conseil Economique, Social et Environnemental, Paris, 16 May, 2018)

Peer-reviewed publications (As per July 2018; H-Index = 26)[1-107]

1. Zhu C, Kong SH, Kim TH, Park SH, Ang RRG, Diana M, Soler L, Suh YS, Lee HJ, Marescaux J, Cao H, Yang HK (2018) The anatomical configuration of the splenic artery influences suprapancreatic lymph node dissection in laparoscopic gastrectomy: analysis using a 3D volume rendering program. *Surg Endosc*
2. Wijsmuller AR, Giraudeau C, Leroy J, Kleinrensink GJ, Rociu E, Romagnolo LG, Melani AGF, Agnus V, Diana M, Soler L, Dallemagne B, Marescaux J, Mutter D (2018) A step towards stereotactic navigation during pelvic surgery: 3D nerve topography. *Surg Endosc*
3. van Manen L, Handgraaf HJM, Diana M, Dijkstra J, Ishizawa T, Vahrmeijer AL, Mieog JSD (2018) A practical guide for the use of indocyanine green and methylene blue in fluorescence-guided abdominal surgery. *J Surg Oncol*
4. Seeliger B, Barberio M, D'Urso A, Agnus V, Longo F, Mascagni P, Marescaux J, Mutter D, Diana M (2018) Fluorescence in rectal cancer surgery. *Annals of Laparoscopic and Endoscopic Surgery* 3:47
5. Saccomandi P, Quero G, Gassino R, Lapergola A, Guerriero L, Diana M, Vallan A, Perrone G, Schena E, Costamagna G, Marescaux J, Di Matteo FM (2018) Laser ablation of the biliary tree: in vivo proof of concept as potential treatment of unresectable cholangiocarcinoma. *Int J Hyperthermia*:1-9
6. Quero G, Lapergola A, Barberio M, Seeliger B, Saccomandi P, Guerriero L, Mutter D, Saadi A, Worreth M, Marescaux J, Agnus V, Diana M (2018) Discrimination between arterial and venous bowel ischemia by computer-assisted analysis of the fluorescent signal. *Surg Endosc*
7. Pesce A, Diana M (2018) Critical View of Safety During Laparoscopic Cholecystectomy: From the Surgeon's Eye to Fluorescent Vision. *Surg Innov*:1553350618763200
8. Noll E, Diemunsch S, Pottecher J, Rameaux JP, Diana M, Sauleau E, Ruetzler K, Diemunsch P (2018) Prevention of laparoscopic surgery induced hypothermia with warmed humidified insufflation: Is the experimental combination of a warming blanket synergistic? *PLoS One* 13:e0199369
9. Mascagni P, Longo F, Barberio M, Seeliger B, Agnus V, Saccomandi P, Hostettler A, Marescaux J, Diana M (2018) New intraoperative imaging technologies: Innovating the surgeon's eye toward surgical precision. *J Surg Oncol* 118:265-282
10. Kong SH, Marchegiani F, Soares R, Liu YY, Suh YS, Lee HJ, Dallemagne B, Yang HK, Marescaux J, Diana M (2018) Fluorescence lymphangiography-guided full-thickness oncologic gastric resection. *Surg Endosc*

11. Guerriero L, Quero G, Diana M, Soler L, Agnus V, Marescaux J, Corcione F (2018) Virtual Reality Exploration and Planning for Precision Colorectal Surgery. *Dis Colon Rectum* 61:719-723
12. Diana M, Noll E, Legner A, Kong SH, Liu YY, Schiraldi L, Marchegiani F, Bano J, Geny B, Charles AL, Dallemagne B, Lindner V, Mutter D, Diemunsch P, Marescaux J (2018) Impact of valve-less vs. standard insufflation on pneumoperitoneum volume, inflammation, and peritoneal physiology in a laparoscopic sigmoid resection experimental model. *Surg Endosc*
13. Baiocchi GL, Diana M, Boni L (2018) Indocyanine green-based fluorescence imaging in visceral and hepatobiliary and pancreatic surgery: State of the art and future directions. *World J Gastroenterol* 24:2921-2930
14. Saccomandi P, Varalda A, Gassino R, Tosi D, Massaroni C, Caponero MA, Pop R, Korganbayev S, Perrone G, Diana M, Vallan A, Costamagna G, Marescaux J, Schena E (2017) Linearly chirped fiber Bragg grating response to thermal gradient: from bench tests to the real-time assessment during in vivo laser ablations of biological tissue. *J Biomed Opt* 22:1-9
15. Saccomandi P, Schena E, Caponero MA, Gassino R, Hernandez J, Perrone G, Vallan A, Diana M, Costamagna G, Marescaux J (2017) Novel carbon fiber probe for temperature monitoring during thermal therapies. *Conf Proc IEEE Eng Med Biol Soc* 2017:873-876
16. Saccomandi P, Quero G, Costamagna G, Diana M, Marescaux J (2017) Effects of Nd:YAG laser for the controlled and localized treatment of early gastrointestinal tumors: Preliminary in vivo study. *Conf Proc IEEE Eng Med Biol Soc* 2017:4533-4536
17. Noll E, Diana M, Charles AL, Singh F, Gan TJ, Pottecher J, Moussallieh FM, Namer IJ, Geny B, Diemunsch P (2017) Comparative analysis of resuscitation using human serum albumin and crystalloids or 130/0.4 hydroxyethyl starch and crystalloids on skeletal muscle metabolic profile during experimental haemorrhagic shock in swine: A randomised experimental study. *Eur J Anaesthesiol* 34:89-97
18. Liu YY, Liao CH, Diana M, Wang SY, Kong SH, Yeh CN, Dallemagne B, Marescaux J, Yeh TS (2017) Near-infrared cholecystocholangiography with direct intragallbladder indocyanine green injection: preliminary clinical results. *Surg Endosc*
19. Legner A, Diana M, Halvax P, Liu YY, Zorn L, Zanne P, Nageotte F, De Mathelin M, Dallemagne B, Marescaux J (2017) Endoluminal surgical triangulation 2.0: A new flexible surgical robot. Preliminary pre-clinical results with colonic submucosal dissection. *Int J Med Robot*
20. Halvax P, Diana M, Nagao Y, Marescaux J, Swanstrom L (2017) Experimental Evaluation of the Optimal Suture Pattern With a Flexible Endoscopic Suturing System. *Surg Innov* 24:201-204

21. Friedman-Levi Y, Larush L, Diana M, Marchegiani F, Marescaux J, Goder N, Lahat G, Klausner J, Eyal S, Magdassi S, Nizri E (2017) Optimization of liposomal indocyanine green for imaging of the urinary pathways and a proof of concept in a pig model. *Surg Endosc*
22. Diana M, Soler L, Agnus V, D'Urso A, Vix M, Dallemagne B, Faucher V, Roy C, Mutter D, Marescaux J, Pessaux P (2017) Prospective Evaluation of Precision Multimodal Gallbladder Surgery Navigation: Virtual Reality, Near-infrared Fluorescence, and X-ray-based Intraoperative Cholangiography. *Ann Surg*
23. Diana M, Noll E, Charles AL, Diemunsch P, Geny B, Liu YY, Marchegiani F, Schiraldi L, Agnus V, Lindner V, Swanstrom L, Dallemagne B, Marescaux J (2017) Precision real-time evaluation of bowel perfusion: accuracy of confocal endomicroscopy assessment of stoma in a controlled hemorrhagic shock model. *Surg Endosc* 31:680-691
24. Diana M, Noll E, Agnus V, Liu YY, Kong SH, Legner A, Diemunsch P, Marescaux J (2017) Reply to Letter: "Enhanced Reality Fluorescence Videography to Assess Bowel Perfusion: The Cybernetic Eye". *Ann Surg* 265:e49-e52
25. Diana M, Liu YY, Pop R, Kong SH, Legner A, Beaujeux R, Pessaux P, Soler L, Mutter D, Dallemagne B, Marescaux J (2017) Superselective intra-arterial hepatic injection of indocyanine green (ICG) for fluorescence image-guided segmental positive staining: experimental proof of the concept. *Surg Endosc* 31:1451-1460
26. Diana M (2017) Enabling precision digestive surgery with fluorescence imaging. *Transl Gastroenterol Hepatol* 2:97
27. Diana M (2017) Fluorescence-guided surgery applied to the digestive system: the cybernetic eye to see the invisible. *Cir Esp*
28. Conrad C, Wakabayashi G, Asbun HJ, Dallemagne B, Demartines N, Diana M, Fuks D, Gimenez ME, Goumard C, Kaneko H, Memeo R, Resende A, Scatton O, Schneck AS, Soubrane O, Tanabe M, van den Bos J, Weiss H, Yamamoto M, Marescaux J, Pessaux P (2017) IRCAD recommendation on safe laparoscopic cholecystectomy. *J Hepatobiliary Pancreat Sci*
29. Audigier C, Mansi T, Delingette H, Rapaka S, Passerini T, Mihalef V, Jolly MP, Pop R, Diana M, Soler L, Kamen A, Comaniciu D, Ayache N (2017) Comprehensive preclinical evaluation of a multi-physics model of liver tumor radiofrequency ablation. *Int J Comput Assist Radiol Surg*
30. Wu T, Heuillard E, Lindner V, Bou About G, Ignat M, Dillenseger JP, Anton N, Dalimier E, Gosse F, Foure G, Blindauer F, Giraudeau C, El-Saghire H, Bouhadjer M, Calligaro C, Sorg T, Choquet P, Vandamme T, Ferrand C, Marescaux J, Baumert TF, Diana M, Pessaux P, Robinet E (2016) Multimodal imaging of a humanized orthotopic model of hepatocellular carcinoma in immunodeficient mice. *Sci Rep* 6:35230
31. Saccomandi P, Schena E, Diana M, Di Matteo FM, Costamagna G, Marescaux J (2016) Multipoint temperature monitoring in liver undergoing computed tomography-

- guided radiofrequency ablation with fiber Bragg grating probes. *Conf Proc IEEE Eng Med Biol Soc* 2016:5174-5179
32. Marescaux J, Diana M (2016) Looking at the future of surgery with the augmented eye. *Annals of Laparoscopic and Endoscopic Surgery* 1
 33. Liu YY, Pop R, Diana M, Kong SH, Legner A, Beaujeux R, Marescaux J (2016) 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* 30:2143-2150
 34. Liu YY, Kong SH, Diana M, Legner A, Wu CC, Kameyama N, Dallemagne B, Marescaux J (2016) Near-infrared cholecysto-cholangiography with indocyanine green may secure cholecystectomy in difficult clinical situations: proof of the concept in a porcine model. *Surg Endosc* 30:4115-4123
 35. Kong SH, Haouchine N, Soares R, Klymchenko A, Andreiuk B, Marques B, Shabat G, Piechaud T, Diana M, Cotin S, Marescaux J (2016) Robust augmented reality registration method for localization of solid organs' tumors using CT-derived virtual biomechanical model and fluorescent fiducials. *Surg Endosc*
 36. Kong SH, Diana M, Liu YY, Lee HJ, Legner A, Soares R, Swanstrom L, Dallemagne B, Yang HK, Marescaux J (2016) Novel method for hybrid endo-laparoscopic full-thickness gastric resection using laparoscopic transgastric suture passer device. *Surg Endosc* 30:1683-1691
 37. Franchini Melani AG, Diana M, Marescaux J (2016) The quest for precision in transanal total mesorectal excision. *Tech Coloproctol* 20:11-18
 38. Diemunsch PA, Noll E, Pottecher J, Diana M, Geny B, Joshi GP (2016) Impact of nitrous oxide on the haemodynamic consequences of venous carbon dioxide embolism: An experimental study. *Eur J Anaesthesiol* 33:356-360
 39. Diana M, Usmaan H, Legner A, Yu-Yin L, D'Urso A, Halvax P, Nagao Y, Pessaux P, Marescaux J (2016) Novel laparoscopic narrow band imaging for real-time detection of bile leak during hepatectomy: proof of the concept in a porcine model. *Surg Endosc* 30:3128-3132
 40. Diana M, Schiraldi L, Liu YY, Memeo R, Mutter D, Pessaux P, Marescaux J (2016) 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* 5:329-344
 41. Diana M, Robinet E, Liu YY, Legner A, Kong SH, Schiraldi L, Marchegiani F, Halvax P, Swanstrom L, Dallemagne B, Marescaux J (2016) 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* 23:567-573

42. 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 (2015) Use of a Closed Culture System to Improve the Safety of Lentiviral Vector Production. *Hum Gene Ther Methods* 26:197-210
43. Vix M, Diana M, Marx L, Callari C, Wu HS, Perretta S, Mutter D, Marescaux J (2015) Management of staple line leaks after sleeve gastrectomy in a consecutive series of 378 patients. *Surg Laparosc Endosc Percutan Tech* 25:89-93
44. Pessaux P, Diana M, Soler L, Piardi T, Mutter D, Marescaux J (2015) Towards cybernetic surgery: robotic and augmented reality-assisted liver segmentectomy. *Langenbecks Arch Surg* 400:381-385
45. Noll E, Diana M, Diemunsch P (2015) A Multimodal Approach to Prevent Laparoscopic High Peritoneal Air Fraction. *Anesth Analg* 121:1402
46. Marescaux J, Diana M (2015) Next step in minimally invasive surgery: hybrid image-guided surgery. *J Pediatr Surg* 50:30-36
47. Marescaux J, Diana M (2015) Inventing the future of surgery. *World J Surg* 39:615-622
48. Liu YY, Diana M, Halvax P, Cho S, Legner A, Alzaga A, Swanstrom L, Dallemagne B, Marescaux J (2015) Flexible endoscopic single-incision extraperitoneal implant and fixation of peritoneal dialysis catheter: proof of concept in the porcine model. *Surg Endosc* 29:2402-2406
49. Halvax P, Diana M, Legner A, Lindner V, Liu YY, Nagao Y, Cho S, Marescaux J, Swanstrom LL (2015) Endoluminal full-thickness suture repair of gastrotomy: a survival study. *Surg Endosc* 29:3404-3408
50. Hallet J, Soler L, Diana M, Mutter D, Baumert TF, Habersetzer F, Marescaux J, Pessaux P (2015) Trans-thoracic minimally invasive liver resection guided by augmented reality. *J Am Coll Surg* 220:e55-60
51. Diana M, Swanstrom LL, Halvax P, Legner A, Liu YY, Alzaga A, D'Urso A, Marescaux J (2015) Esophageal covered stent fixation using an endoscopic over-the-scope clip. Mechanical proof of the concept and first clinical experience. *Surg Endosc* 29:3367-3372
52. Diana M, Pop R, Beaujeux R, Dallemagne B, Halvax P, Schlagowski I, Liu YY, Diemunsch P, Geny B, Lindner V, Marescaux J (2015) 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* 25:550-558
53. Diana M, Noll E, Diemunsch P, Moussallieh FM, Namer IJ, Charles AL, Lindner V, Agnus V, Geny B, Marescaux J (2015) Metabolism-Guided Bowel Resection: Potential Role and Accuracy of Instant Capillary Lactates to Identify the Optimal Resection Site. *Surg Innov* 22:453-461

54. Diana M, Noll E, Agnus V, Liu YY, Kong SH, Legner A, Diemunsch P, Marescaux J (2015) Reply to Letter: "Enhanced Reality Fluorescence Videography to Assess Bowel Perfusion: The Cybernetic Eye". *Ann Surg*
55. Diana M, Marescaux J (2015) Robotic surgery. *Br J Surg* 102:e15-28
56. 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 (2015) Gastric supply manipulation to modulate ghrelin production and enhance vascularization to the cardia: proof of the concept in a porcine model. *Surg Innov* 22:5-14
57. Diana M, Halvax P, Mertz D, Legner A, Brule JM, Robinet E, Mutter D, Pessaux P, Marescaux J (2015) Improving Echo-Guided Procedures Using an Ultrasound-CT Image Fusion System. *Surg Innov* 22:217-222
58. Diana M, Agnus V, Halvax P, Liu YY, Dallemagne B, Schlagowski AI, Geny B, Diemunsch P, Lindner V, Marescaux J (2015) Intraoperative fluorescence-based enhanced reality laparoscopic real-time imaging to assess bowel perfusion at the anastomotic site in an experimental model. *Br J Surg* 102:e169-176
59. Chung H, Diana M, Liu KH, Katsichtis T, Dallemagne B, Marescaux J (2015) East Meets West-A Novel Steerable Grasper to Facilitate Gastric Endoscopic Submucosal Dissection (ESD): Randomized Comparative Study in a Porcine Model. *Surg Innov* 22:117-122
60. Bodin F, Diana M, Koutsomanis A, Robert E, Marescaux J, Bruant-Rodier C (2015) Porcine model for free-flap breast reconstruction training. *J Plast Reconstr Aesthet Surg* 68:1402-1409
61. Vix M, Liu KH, Diana M, D'Urso A, Mutter D, Marescaux J (2014) 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* 28:821-826
62. Selka F, Agnus V, Nicolau S, Bessaid A, Soler L, Marescaux J, Diana M (2014) Fluorescence-Based Enhanced Reality for Colorectal Endoscopic Surgery. *Biomedical Image Registration*, London, UK, July 7-8, 2014, pp 114-123
63. Pessaux P, Diana M, Soler L, Piardi T, Mutter D, Marescaux J (2014) Robotic duodenopancreatectomy assisted with augmented reality and real-time fluorescence guidance. *Surg Endosc* 28:2493-2498
64. Nagao Y, Diana M, Vix M, D'Urso A, Mutter D, Marescaux J (2014) Age impact on weight loss and glycolipid profile after laparoscopic sleeve gastrectomy: experience with 308 consecutive patients. *Surg Endosc* 28:803-810
65. Diana M, Pessaux P, Marescaux J (2014) New technologies for single-site robotic surgery in hepato-biliary-pancreatic surgery. *J Hepatobiliary Pancreat Sci* 21:34-42
66. 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 (2014)

- Enhanced-reality video fluorescence: a real-time assessment of intestinal viability. *Ann Surg* 259:700-707
67. Diana M, Mutter D, Lindner V, Vix M, Chung H, Demartines N, Marescaux J (2014) A modular magnetic anastomotic device for minimally invasive digestive anastomosis: proof of concept and preliminary data in the pig model. *Surg Endosc* 28:1613-1623
 68. Diana M, Halvax P, Dallemagne B, Nagao Y, Diemunsch P, Charles AL, Agnus V, Soler L, Demartines N, Lindner V, Geny B, Marescaux J (2014) Real-time navigation by fluorescence-based enhanced reality for precise estimation of future anastomotic site in digestive surgery. *Surg Endosc* 28:3108-3118
 69. Diana M, Dallemagne B, Chung H, Nagao Y, Halvax P, Agnus V, Soler L, Lindner V, Demartines N, Diemunsch P, Geny B, Swanstrom L, Marescaux J (2014) 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* 28:3224-3233
 70. Diana M, Callari C, D'Agostino J, Wu HS, Mutter D, Marescaux J (2014) 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* 24:461-464
 71. Cha R, Marescaux J, Diana M (2014) Updates on gastric electrical stimulation to treat obesity: Systematic review and future perspectives. *World J Gastrointest Endosc* 6:419-431
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Book chapters

1. **Michele Diana, Vincent Agnus, 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
2. **Michele Diana, Jacques Marescaux.**
New technology in thyroid and parathyroid surgery in *Textbook of Endocrine Surgery* 3rd Edition. Editors Orlo H. Clark and Quan-Yang Duh
3. **Michele Diana, Silvana Perretta.**
Laparoscopic and Single-Incision Sleeve Gastrectomy. Chapter 29 in: *Mastery of Endoscopic and Laparoscopic Surgery* 4th Edition. Editors Nathaniel Soper and Lee Swannstrom. Publisher: Wolters Kluwer Health: Lippincott Williams and Wilkins 2014.
4. **Joel Leroy, Michele Diana, James Wall, Jacques Marescaux.**
NOTES® applications in colorectal surgery. In *Atlas Textbook in NOTES®* by R Zorron & J Marescaux
5. **Michel Vix, James Wall, Michele Diana, Jacques Marescaux.**
NOTES® applications in bariatric surgery. In *Atlas Textbook in NOTES®* by R Zorron & J Marescaux
6. **Bernard Dallemagne, Silvana Perretta, 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
7. **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
8. **Jacques Marescaux, Michele Diana**
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9. **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

10. Michele Diana, Jacques Marescaux

Image Fusion, Virtual Reality and Hybrid Imaging in HPB surgery - Landmark or fashion? Chapter in Hepato-Pancreato-Biliary and Transplant Surgery: Practical Management of Dilemmas. Editor Mariano Gimenez (2018, in Press)

11. Michele Diana, Stéphane Nicolau, Luc Soler, Jacques Marescaux

Augmented Reality. Chapter in Operative Endoscopic and Minimally Invasive Surgery. Editors Daniel B. Jones and Steven D. Schwartzberg. Nova Tech Set (2018, in Press)

Grants as Primary Investigator (as per November 2018, total amount 2.5M Euros)

Year	Position	Project	Funding source	Amount (k€)
2018	Research Director (IHU-Strasbourg); Co-PI with Professor Eric Vibert, Hôpital Paul Brousse, Paris); Coordinator Professor Sylvain Gioux (I-CUBE, Strasbourg)	LIVERSURG	Agence Nationale de la Recherche (ANR)	520
2017	Research Director (IHU- Strasbourg) ; Co-PI with Professor Andrey Klymchenko	NICE	Conectus Alsace SATT (Society to Accelerate Tech Transfer)	400
2017	Research Director (IHU-Strasbourg)	GAMMA	IHU	300
2016	Research Director (IHU-Strasbourg)	ELIOS	Foundation ARC	880
2016	Research Director (IHU-Strasbourg)	GAMMA 2.0	European Association of Endoscopic Surgery (EAES)	35
2015	Research Director (IHU-Strasbourg)	IHU- SPECTRA	IHU	110
2015	Research Director (IHU-Strasbourg)	HAMMER	Fisher & Paykel	30
2014	Research Director (IHU-Strasbourg)	EMBARGO 2.0	IHU	50
2013	Senior Researcher (IRCAD et EA3072)	GAMMA poc	IHU	50
2013	Senior Researcher (IRCAD et EA3072)	EMBARGO poc	IHU	50
2013	Senior Researcher (IRCAD et EA3072)	FLER	Karl Storz	30
2011	Resident in Digestive Surgery (CHUV, Lausanne) and Surgical Research Fellow at IRCAD	Modular Auto- Assembling Anastomotic system	IRCAD	35
2011	Resident in Digestive Surgery (CHUV, Lausanne) and Surgical Research Fellow at IRCAD	TEO vs EEA	IRCAD	25

Grants as Co-Investigator

1) Co-investigator of the project « QuantSURG » proposal ID 715737 ERC-2016-STG; ERC obtained by Professor Sylvain Gioux (I-CUBE, Strasbourg)

Amount: 1,8M Euros

2) Co-investigator of the project « Hybrid Material for Fighting Obesity » Funded by the USIAS in collaboration with Professor Luisa de Cola (ISIS, Strasbourg) and Professor Silvana Perretta (IRCAD, Strasbourg)

Amount: 140K Euros

3) Co-investigator of the project « LASER OPTIMAL » ERC obtained by Dr. Paola Saccomandi (IHU-Strasbourg)

Amount: 1,2M Euros

Other awards

- Best Investigator Award at the iSMIT 2018, Seoul, South Korea (7-10 November 2018)
- 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)
- Best innovation paper award EAES 2013 Vienna
- UEGW travel grant 2011 (Stockholm)
- EECMID travel grant 2011 (Milan)

Teaching and Mentoring experience (up to June 2018)

Faculty member at various courses in Minimally-Invasive Surgery.

This activity includes podium presentations on hot topics relevant to MIS techniques and technologies. Additionally, the faculty assists the participants during the hands-on parts in the surgical lab.

From 2010 up to September 2018: 97 courses, for a total of approximately 1500 hours of teaching.

- 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)
- 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)
- 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 (IRCAD-EITS, Strasbourg 6-7 November 2015)
- Faculty at the Intensive Laparoscopic Surgery Course (IRCAD-EITS, Strasbourg 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)
- Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg, 14-18 November 2016)
- Faculty at the Bariatric Surgery Course (IRCAD, Strasbourg 2-3 December 2016)
- Faculty at the Colorectal Surgery Course (IRCAD/EITS, Strasbourg 15-16 December 2016)
- Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg, 23-27 January 2017)
- Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg, 15-19 May 2017)
- Faculty at the Gynecology course (oncology) (IRCAD/EITS, Strasbourg, 24 May 2017)
- Faculty at the Colorectal surgery course (IRCAD/EITS, Strasbourg, 1-3 June 2017)
- Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg, 3-7 July 2017)
- Faculty at the BEST (Business Engineering Surgical Technology) Course (IRCAD, Strasbourg, August 2017)
- Faculty at the University Diploma in Surgical Endoscopy (IHU-Strasbourg, 11-13 September 2017)
- Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg, 18-22 September 2017)
- Faculty at the Colorectal surgery course (IRCAD/EITS, Strasbourg, 2-4 November 2017)
- Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg, 13-17 November 2017)
- Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg, 29 January- 2 February 2018)
- Faculty at the Intensive Laparoscopic Surgery Course (IRCAD/EITS, Strasbourg, 14-18 May 2018)

- Faculty at the Colorectal Surgery Course (IRCAD/EITS, Strasbourg, 24-26 May 2018)
- Faculty at the Intensive Laparoscopic Surgery Course (IRCAD-EITS, Strasbourg, 2-6 July 2018)
- Faculty at the University Diploma in Surgical Endoscopy (IRCAD-EITS, Strasbourg, 9-11 July 2018)
- Faculty at the BEST (Business Engineering Surgical Technology) Course (IRCAD, Strasbourg, August 2018)
- Faculty at the Laparoscopic Hernia Course (IRCAD-EITS, Strasbourg, 20-21 Sept 2018)
- Faculty at the Intensive Laparoscopic Course (IRCAD-EITS, Strasbourg, 24-26 Sept 2018)
- Faculty at the course Sentinel Lymph Node in Breast Cancer: from tradition to innovation (organized by the ELSAN group, IRCAD, Strasbourg, 20 Oct 2018)
- Faculty at the Intensive Laparoscopic Course (IRCAD-EITS, Strasbourg, 12-16 Nov 2018)
- Faculty at the surgery Course for scrub nurses (IRCAD/EITS, Strasbourg 19 Nov 2018)

Mentoring activity

During my career, I had the opportunity to mentor several students at various degrees

Ph.D Thesis

Name (place and d.o.b.)	Years	Position and % of my supervision	Institution	Current position (2017)
Anant Suraj Vemuri	2014	Ph.D Student (10%)	IRCAD, France	Post-doc at DKFZ, German Cancer Research Center, Heidelberg
	Thesis title (AR FLEX Project): Precision computer-assisted Barrett Esophagus follow-up. Relocalization of previous biopsy sites with electromagnetic tracking and time-machine patient-specific video archive			
Sylvain Bernard	2016	Ph.D Student (5%)	IRCAD, France	PhD Student IRCAD, France
	Thesis title: LASAR Project			
Manuel Barberio	2018	Ph.D Student (100%)	IHU-Strasbourg	Ph.D Student
	Thesis title: ongoing			
Barbara Seeliger	2018	Ph.D Student (100%)	IHU-Strasbourg	Ph.D Student
	Thesis title: ongoing			

MD Thesis

Name (place and d.o.b.)	Years	Position under my supervision	Institution	Current position (2017)
Luigi Schiraldi (Trieste, 20.03.1989)	2015	Surgical Research Fellow	IRCAD, France	Resident in General Surgery, Switzerland
	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)			
Francesco Marchegiani (Pescara, 10.01.1991)	2015	Surgical Research Fellow	IHU-Strasbourg, France	Resident in General Surgery, Padova, Italy
	Thesis title: Morpho-functional evaluation of perfusion in fluorescence-assisted robotic colorectal surgery			

Master of Science in Biomedical Engineering

Name	Years	Position under my supervision	Institution	Current position (2017)
Giorgia Vita (Rome, 6.02.1992)	2016	Engineering Research Fellow	IHU-Strasbourg, France and Campus Biomedico, Rome	Researcher, Campus Biomedico, Rome
	Thesis title: Thermometry in medical applications: experiments on animal models (pending publication)			
Daniela Lo Presti (Agrigento, 31.05.1991)	2016	Engineering Research Fellow	IHU-Strasbourg, France and Campus Biomedico, Rome	Researcher, Campus Biomedico, Rome
	Thesis title: Design and development of an MRI-compatible textile system for intraoperative monitoring of vital parameters			

Students

Name	Years	Position under my supervision	Institution	Follow-up position
Emilie Seyller	2018	Master 2 Student in Life Science	IHU-Strasbourg and EA3072 Physiology Institute	
Farid Ouhmich	2016	Master 2 Student in computer science	IRCAD	
	Project title: development of a software (SELF) enabling a Selective Erasing of Liver Fluorescence.			
Faiçal Selka	2014	Post-Doc	IRCAD	
	Project title: development of a software enabling real-time tracking of the virtual perfusion cartography to evaluate bowel perfusion			

Post-Doc and International Fellows in Minimally-Invasive Surgery, Flexible Endoscopy and Interventional Radiology at both IHU-Strasbourg and IRCAD

During my experience, I had the opportunity to mentor and supervise the research activities of several international Fellows in hybrid surgical techniques. In particular, I was in charge of helping with the redaction of research protocols and organizing the experimental procedures, data collection and interpretation, and manuscript drafting. The following fellows were particularly brilliant and prolific, as witnessed by the multiple scientific articles published and pending publication:

- 1) **Dr Yu-Yin Liu**, surgeon from Taiwan, working at the Linkou Chang Gung Memorial Hospital, Chang Gung University, Taoyuan, Taiwan. Dr Liu spent 2 years in Strasbourg (2013-2015) and could publish, under my direction, 14 articles. Such scientific activity enabled him to become Associate Professor. Dr Liu is still collaborating with us and particularly with the IHU-SPECTRA Research Unit, since we have ongoing trials on Fluorescence-Guided Surgery.
- 2) **Dr Peter Halvax**, resident in surgery, from Hungary. He spent 2 years in Strasbourg (2013-2015) and he could publish 11 articles under my direction. Currently, he is finalizing his surgical residency in Munich (Germany) and he keeps on acting as a faculty member in several surgical courses organized at IRCAD and IHU-Strasbourg.
- 3) **Dr Andras Legnèr**, surgeon from Hungary. He spent 2 years in Strasbourg (2014-2016) and he could publish 12 articles under my direction. Currently, he is Staff Surgeon in Vienna (Austria) and he also keeps on acting as a faculty member in several surgical courses organized at IRCAD and IHU-Strasbourg.
- 4) **Dr Seong-Ho Kong**, surgeon from South Korea, working at the Seoul National University Hospital. He spent 2 years in Strasbourg (2014-2016) and he could publish 6 articles under my direction and several are pending publication. He is member of the IHU-SPECTRA and collaborates with the IHU-Strasbourg on several protocols on Fluorescence-Guided Surgery. He has been appointed Associate Professor after his research period in Strasbourg.
- 5) **Dr. Hyunsoo Chung**, gastroenterologist from South Korea. He spent 2 years in Strasbourg (2012-2014). We had the opportunity to develop several endoluminal surgical techniques and published 6 articles. He is currently Associate Professor in Seoul.
- 6) **Dr. Yoshihiro Nagao**, surgeon from Japan. He spent 1 year in Strasbourg (2013) and he could publish 6 articles. He is currently Associate Professor.
- 7) **Dr. Alfonso Lapergola**, resident in surgery from Italy. He spent 1 year (2017) in Strasbourg under my direction, working on experimental protocols of fluorescence-guided surgery. He is currently back to his residency program in Chieti (Italy). Dr. Lapergola has planned to return in 2018 to prepare his specialty thesis in Strasbourg.
- 8) **Dr. Giuseppe Quero**, surgeon from Italy He spent 1 year (2016-2017) in Strasbourg under my direction, working on experimental protocols of fluorescence-guided surgery. He is currently back to Rome (Italy), where he obtained a staff surgeon position.
- 9) **Dr. Paola Saccomandi**, PhD in Biomedical Engineering, from Italy. Paola is working at the IHU-Strasbourg since 2016 and she has obtained a permanent researcher position. She has joined the IHU-SPECTRA unit, working on Laser applications in surgery and thermometry monitoring of energy-based ablations. Under my supervision, Paola has obtained a grant from the European Research Council (ERC starting grant) for the project LASER OPTIMAL (1.2 M Euros).
- 10) **Dr. Sophie Pernot**, PhD in Molecular Biology, from France. Sophie is working at the IHU-Strasbourg since 2016 as an “Innovation Fellow”. She has developed important management skills and recently joined the IHU-SPECTRA as project manager, under my supervision.

2018 Fellows under my responsibility:

- 1) **Rioui Watanabe (Japan; Surgical Research Fellow, IRCAD)**
- 2) **Ludovica Guerriero (Italy; Surgical Research Fellow, IHU)**
- 3) **Barbara Seeliger (Germany; PhD Student, IHU-SPECTRA)**
- 4) **Manuel Barberio (Italy/Germany; PhD Student, IHU-SPECTRA)**
- 5) **Fabio Longo (Italy; Surgical Research Fellow, IHU)**
- 6) **Pietro Mascagni (Italy; Surgical Research Fellow, IRCAD)**
- 7) **Claudio Fiorillo (Italy; Surgical Research Fellow, IHU)**

Professional Memberships

Active memberships

- **2017 Honorary member** of the Brazilian Society of Oncologic Surgery (SBCO)
- **2016** Value-based Healthcare French Circle
- **2015** Society for Medical Innovation and Technology (ISMIT)
 - Member of the Steering Committee (since 2016)
 - President Elect iSMIT 2022
- **2015** Society of American Gastrointestinal and Endoscopic Surgeons (SAGES)
 - International Member 2
- **2015** European Association of Endoscopic Surgeons (EAES)
 - Member of the Technology Committee (2016-2020)
- **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 (publons.com/a/1293028/) for several journals, including:
 - 1) Annals of Surgery
 - 2) Surgical Innovation
 - 3) Surgical Endoscopy
 - 4) Gastroenterology
 - 5) Journal of Pediatric Surgery
 - 6) International Journal of Computer Assisted Radiology and Surgery
 - 7) Future Oncology
 - 8) British Journal of Surgery
 - 9) European Radiology
 - 10) Minimally Invasive Therapy & Allied Technologies
 - 11) European Surgical Research
 - 12) International Journal of Surgery
 - 13) Expert Review of Gastroenterology and Hepatology
 - 14) Journal of Endocrinological Investigation
 - 15) BMJ open
 - 16) Computer Assisted Surgery
 - 17) Diseases of the Colon and Rectum
 - 18) Diseases of the Esophagus
 - 19) Molecular Pharmaceutics
 - 20) Colorectal Disease
 - 21) Journal of Vascular and Interventional Radiology
 - 22) Scientific Reports

Patents

1) Modular Magnetic Anastomotic Device

Publication number: 20150164508

Abstract: The present disclosure provides modular magnetic anastomosis devices that can be implemented in digestive surgery or in any circumstance of anastomosis between adjacent organs or two hollow viscera. The device is minimally invasive and easily and quickly delivered using laparoscopic or endoscopic procedures.

Filed: July 11, 2012

Publication date: June 18, 2015

Applicant: IRCAD

Inventors: Juan HERNANDEZ, Michele DIANA, James Kennedy WALL

2) Applicators for Modular Magnetic Anastomotic Device

Publication number: WO 2014102621 A3

Other references of publication: EP2934347A2, US20150342608, WO2014102621A2

Abstract: The present disclosure provides description of applicators to implement modular magnetic anastomosis device. In one embodiment the delivery device is a laparoscopic instrument for MISS surgery, in another embodiment the delivery device is endoscopy or colonoscopy instrument for NOTES surgery

Filed: December 21, 2012

Publication date: April 23, 2015

Applicant: IRCAD

Inventors: Juan HERNANDEZ, Michele DIANA

3) Method and system for detecting leaks and/or verifying adequate closure following a medical procedure

Publication number: 20150272499

Abstract: Method for detecting leaks and/or verifying adequate closure following a medical procedure, on a hollow or tubular organ of a subject, wherein a leak test is performed by injecting or insufflating, in the concerned organ, a specific test gas which is not commonly produced or naturally present within the body of the subject, or which is present or produced in a precisely known amount or concentration, and by analyzing percutaneously the gas or gas mixture present locally within the body cavity in which the organ is situated, and then verifying the presence, and preferably determining the concentration, of the injected or

insufflated test gas in the local gas or gas mixture of the body cavity and indicating whether the concerned organ or a lumen defined by the latter is leak-free or not.

Filed: March 25, 2015

Publication date: October 1, 2015

Inventors: Eran SHLOMOVITZ, Lee L. SWANSTROM, Michele DIANA

4) Implantable device to treat obesity

Publication number: 20160235569

Abstract: An implantable device to treat obesity and a method of using the same, the device (31) is able to create a repetitive mechanical constraint on a gastrointestinal organ wall and includes: an energy source (36), and a mechanical stimulation element (35).

Type: Application

Filed: September 29, 2014

Publication date: August 18, 2016

Inventors: Michele DIANA, Peter HALVAX, Fernand MARTEL, Bruno MUTET, Lee SWANSTROM

5) Fluorescent polymeric coating film for medical devices

Publication number: 18305075.6

Filed: January 26, 2018

Inventors: Andrey KLYMCHENKO, Seong-Ho KONG, Michele DIANA, Renato SOARES

Conferences: invited speaker and/or course director

Date	Conference	Location	Role	Presentation(s) title
November 8-10, 2018	International Society for Medical Innovation and Technology (iSMIT) 2018 meeting	Seoul, South Korea	Invited Speaker & Chairman	Smart hybrid OR for precision therapies
October 25-27, 2018	18 th MMESA Congress (Mediterranean and Middle Eastern Endoscopic Surgery Association)	Reims, France	Keynote Speaker	Augmented Reality & Surgery
October 11, 2018	French days of Diagnostic and Interventional Radiology organized by France Life Imaging (FLI)	Paris, France	Invited Speaker	Near-Infrared Intraoperative Imaging: state of the art and future perspectives
September 29, 2018	10 th SERGS Annual Meeting on Robotic Gynecological Surgery	Milan, Italy	Invited Speaker	Augmented Reality in surgery
September 27, 2018	International Workshop. Intraoperative ICG fluorescence Imaging in Abdominal Surgery: Prevention of Complications and Oncological Perspectives	Milan, Italy	Keynote Speaker	When teaching surgical technology sets the example worldwide. Insights from IRCAD
September 21, 2018	The ERAS protocol and the minimally-invasive and robotic surgery. III Workshop	Bari, Italy	Keynote Speaker	Clinical applications of fluorescence imaging in digestive surgery
September 13-15 th , 2018	13 th International Single Topic Symposium (ISTS)	Yeosu, South Korea	Keynote Speaker	Image-Guided Surgery: the augmented eye towards surgical precision
June 22 nd , 2018	E-MRS Spring Meeting 2018 Symposium E "Nanotechnology	Strasbourg, France	Keynote speaker	Fluorescence-guided Surgery: the cybernetic eye to see the invisible

	for targeted personalized medicines and theranostics”			
June 8 th , 2018	Coloproctologia 3.0	Lazise (Verona), Italy	Keynote speaker	Endoscopic Luminescent Imaging for precision Oncologic Surgery: the ELIOS project
May 30 th to June 1 st , 2018	26 th International Congress of the European Association for Endoscopic Surgery (EAES)	London, UK	Course Director of the Masterclass in Fluorescence-Guided Surgery (co-director Prof. Luigi Boni)	The IRCAD-IHU-EAES EURO-FIGS registry: 1-year activity
			Keynote speaker	Smart Hybrid Operating Room for precision therapies
			Chairman	What’s new in technology?
			Chairman	Intraoperative Imaging
			Panel	Consensus on 3D imaging technology in minimally-invasive surgery
May 24 th , 2018	PRESSE RELEASE : Dernières Nouvelles d’Alsace	Strasbourg, France	Invited keynote speaker	Endoscopic Luminescent Imaging for precision Oncologic Surgery: the ELIOS project
May 18 th , 2018	14 ^o Congresso Brasileiro de Videocirurgia (SOBRACIL)	Curitiba, Brasil	Invited keynote speaker	Technology leveraged innovations to reduce complications in colorectal surgery
April 20 th , 2018	26 th symposium of the ASRCC (Association Suisse Romande de Chirurgie Coelioscopique)	Lausanne, Switzerland	Invited keynote speaker	New surgical developments: towards the bio-artificial surgeon
April 11-14, 2018	Annual meeting of the Society of American Gastrointestinal Endoscopic Surgeons (SAGES)	Seattle, USA	Invited Speaker (Faculty)	Bariatric Embolization: an emerging weight loss procedure
April 7 th , 2018	Japanese Society of Fluorescence Guided Surgery, during the 118 th Annual Congress of Japan Surgical Society	Tokyo, Japan	Invited Keynote Speaker	Computer-assisted enhanced reality assessment of the fluorescence signal to estimate bowel perfusion

April 6 th , 2018	Beyond Gynecology Surgery	Clermont Ferrand, France	Invited Keynote Speaker	The 21st century OR from endoscopy to functional MRI and fluorescence
February 15, 2018	5th International Conference on Fluorescence Guided Surgery (during the 15 th Foregut Symposium of Cleveland Clinic)	Fort Lauderdale, Florida, USA	Invited speaker and Chairman	Quantification of the fluorescence signal applied to anastomotic perfusion
January 26 th , 2018	PERITONEAL CARCINOMATOSIS: STATE OF THE ART AND FUTURE PROSPECTS	Rome, Italy	Invited Keynote Speaker	Endoscopic Luminescent Imaging for precision Oncologic Surgery: the ELIOS project
December 2 nd , 2017	Seoul International Gastric Cancer Forum	Seoul, South Korea	Invited Keynote Speaker	Endoscopic Luminescent Imaging for precision Oncologic Surgery: the ELIOS project
November 27-28, 2017	11 th International NOTES W.I.D.E.R.	Barcelona, Spain	Invited Keynote Speaker	1) Intraoperative imaging: the augmented eye for precision surgery 2) Endoluminal triangulation 2.0: development of a robotically assisted surgical endoscopic platform
November 23-25, 2017	9 th Conference of the Romanian Association of Endoscopic Surgery	Bucharest, Romania	Invited Keynote Speaker	Fluorescence-guided Surgery: the cybernetic eye to see the invisible
November 9-10, 2017	29 th iSMIT (International Society of Medical Innovation and Technology) conference	Turin, Italy	Chairman	Innovations in endoscopic surgery
October 27, 2017	Brazilian Congress of Cancer Surgery	Rio de Janeiro, Brazil	Invited Keynote Speaker	Fluorescence-guided Surgery: the cybernetic eye to see the invisible
October 21, 2017	International Workshop on Fluorescence-guided Imaging	Brescia, Italy	Invited Keynote Speaker	Fluorescence Imaging: state of the art and future perspectives
October 12-14, 2017	10 th Conference of the Portuguese Society of Minimally Invasive Surgery	Lisbon, Portugal	Invited Keynote Speaker	1. Imaging and MIS: no surprises for the future

				2. Robotic Interventional Radiology
June 14-17, 2017	25 th International Congress of the European Association of Endoscopic Surgery (EAES)	Frankfurt, Germany	Course Director of the Masterclass in Fluorescence-Guided Surgery (co-chairs Professor Luigi Boni and Professor Abe Fingerhut	Future developments of fluorescence angiography
			Chairman of the session on imaging	Virtual Reality and Augmented Reality: a step beyond
May 24-26, 2017	12 th biennial European-African Hepato-Pancreato-Biliary Association Congress 2017	Mainz, Germany	Invited speaker	Prospective evaluation of precision multimodal gallbladder surgery navigation: virtual reality, near-infrared fluorescence, and X-ray-based intraoperative cholangiography
April 27-28, 2017	25 th symposium of the ASRCC	Geneva, Switzerland	Invited keynote speaker	What's new for the future?
April 7, 2017	17 th National Conference of the Italian Association of Biomedical Engineers	Genova, Italy	Invited keynote speaker	The future of surgery, the experience of Strasbourg
February 15, 2017	4 th International Conference on Fluorescence Guided Surgery (during the 15 th Foregut Symposium of Cleveland Clinic)	Fort Lauderdale, Florida, USA	Invited speaker and Chairman	1. Cartography and Digital Documentation of Fluorescent Imaging 2. Clinical translation of the computer-based perfusion assessment
February 1-3, 2017	EAES winter-meeting and EURO-NOTES symposium	Frankfurt, Germany	Invited speaker	New perspectives in endoscopic imaging
December 6-9, 2016	Surgical Humidification Research Symposium	Auckland, New Zealand	Invited speaker	1. Intraoperative hypothermia and CO ₂ insufflation in Minimally-Invasive Surgery 2. Impact of intra-abdominal flow of humidified and warmed carbon dioxide

				(CO ₂) on the healing of colorectal anastomosis 3. Looking at the future of surgery with the augmented eye
November 21-22, 2016	10 th International NOTES W.I.D.E.R 2016 course	Barcelona, Spain	Invited keynote speaker	Fluorescence-Guided Surgery Basic knowledge and potential developments
November 9-12, 2016	World Congress of Endoscopic Surgery (WECS)	Shanghai, China	Invited keynote speaker	1) “Fluorescence-guided surgery: The cybernetic eye for precision surgery” 2) When will Artificial Intelligence replace the surgeon’s brain? 3) Towards the end of hepatic surgery with the rise of minimally-invasive image-guided therapies.
November 7-10, 2016	XXXI National Conference of the Spanish Surgical Association	Madrid, Spain	Invited keynote speaker	To see or not to see: this is the question. 3D, UHD, Augmented Reality, ICG.
September 28, 2016	118 th Conference of the French Association of Surgery (AFC)	Paris, France	Invited speaker	Fluorescence-guided surgery: The cybernetic eye for precision surgery
September 8-9, 2016	16th Conference of the Sociedad Iberico-Americana de Intervencionismo (SIDI)	Zaragoza, Spain	Keynote speaker	Bariatric embolization
June 15-18, 2016	24 th International Congress of the European Association of Endoscopic Surgery (EAES)	Amsterdam, The Netherlands	Invited speaker, chairman and organizer of the session on FLUORESCENCE-	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.

			GUIDED SURGERY	
June 13, 2016	Conference on “Simulation in the training of medical professions”.	University “Gabriele D’Annunzio”, Chieti, Italy	Invited keynote speaker	The Cybersurgery
June 3-5, 2016	Innovation Club of the French Association of Hepatobiliary Pancreatic Surgery and Transplantation: “Open brain and fresh air in surgery”	Carnac, France	Invited speaker	The use of light in surgery
February 14, 2016	SPIE PHOTONICS	Moscone Center San Francisco, USA	Invited Speaker and Chairman of the BIOS session	Fluorescence-based Enhanced Reality to assess bowel perfusion
February 8, 2016	Surgical Horizons Seminar Series	Harvard Medical School, Boston, Massachusetts, USA	Invited speaker	Perspectives on Surgical Guidance Using Near-Infrared Light
February 4, 2016	3rd International Conference on Fluorescence Guided Surgery (during the 15 th Foregut Symposium of Cleveland Clinic)	Boca Raton, Florida, USA	Invited speaker	1. Why should we use near-infrared guidance? 2. Alternative routes of administration of Indocyanine Green
October 5, 2015	Conference of the Italian Society of Colorectal Surgery	Treviso, Italy	Keynote speaker	NEXT STEPS IN MINIMALLY INVASIVE SURGERY: HYBRID IMAGE-GUIDED SURGERY
September 18, 2015	iMed 7.0	Lisbon, Portugal	Keynote speaker	The future of Surgery
June 11, 2015	Meeting of the Ukrainian Society of Surgical Oncology	Kiev, Ukraine	Keynote speaker	Hybrid navigation in surgery

February 14-16, 2015	2nd International Conference on Fluorescence Guided Surgery (during the 14 th Foregut Symposium of Cleveland Clinic)	Coral Gables Miami, Florida, USA	Invited speaker	1) FLUORESCENCE ENHANCED REALITY TO ASSESS ANASTOMOTIC PERFUSION 2) FLUORESCENCE-BASED AUGMENTED REALITY INTRA-OPERATIVE CHOLANGIOGRAPHY: PRELIMINARY RESULTS OF A PROSPECTIVE CLINICAL TRIAL
February 15-16, 2014	First World Conference on Fluorescence Guided Surgery (during the 13 th Foregut Symposium of Cleveland Clinic)	Coral Gables Miami Florida, USA	Invited speaker and founder member of the International Society of Fluorescence-Guided Surgery	Fluorescence enhanced reality evaluation of bowel perfusion
27-29 September, 2012	<u>Austrian Single Incision Symposium</u>	Salzburg, Austria	Keynote speaker	Technical Innovations in Minimally Invasive Surgery

Conferences: paper presentations (podium and poster)

Date	Conference	Location	Role	Presentation title
November 8-10, 2018	International Society for Medical Innovation and Technology (iSMIT) 2018 meeting	Seoul, South Korea	Senior Author	1) Simultaneous computer-assisted assessment of mucosal and serosal perfusion in a model of segmental colonic ischemia (Presenter: Dr. Barbara Seeliger)
				2) HYPER: HYPerspectral based Enhanced Reality to evaluate bowel perfusion (Presenter: Dr. Manuel Barberio: BEST PRESENTATION AWARD)
May 30 th to June 1 st , 2018	26 th International Congress of the European Association for Endoscopic Surgery (EAES)	London, UK	Co-Author (podium)	Predictability of Near-Infrared Fluorescence light sentinel lymph node mapping for colorectal cancer staging (Presenter: Dr. Andrea Picchetto)
May 9-11, 2018	Association of Surgeons of Great Britain and Ireland	Liverpool, UK	Co-Author (podium)	Computer-assisted analysis of ICG fluorescence signal for evaluation of small intestinal anastomotic perfusion. A randomised, blinded, experimental trial (Presenter: Dr Kristina Gosvig)
April 11-14, 2018	Annual meeting of the Society of American Gastrointestinal Endoscopic Surgeons (SAGES)	Seattle, USA	Co-Author (poster)	Preclinical Testing of Novel “Off-On” Fluorescent compound for Dual Wavelength Near-Infrared Imaging Using Commercially Available Instrumentation (Presenter: Prof Ronan Cahill)
			Senior Author (podium)	Discrimination between arterial vs. venous ischemia by computer assisted analysis of the fluorescent signal (Presenter: Dr. Giuseppe Quero)

			Co-Author (poster)	Laser-based intrabiliary ablation: first in vivo experience (Presenter: Dr. Ludovica Guerriero)
			Senior Author (poster)	Modular laser-based endoluminal ablation of early cancers: in vivo dose-effect evaluation and predictive numerical modelling (Presenter: Dr. Giuseppe Quero)
June 14-17, 2017	25 th International Congress of the European Association of Endoscopic Surgery (EAES)	Frankfurt, Germany	Presenter, first author (EAES Research grant)	Gastrointestinal Activity Manipulation to Modulate Aliment Absorption and Appetite
			Presenter, first author	Gastrointestinal hormones manipulation to counteract metabolic syndrome using duodenal artery targeted embolization
			Co-Author, AMAZING TECHNOLOGY SESSION	Stable fluorescent implants for gastrointestinal tattooing (Presenter: Dr Manuel Barberio)
May 4-6, 2017	European Surgical Association meeting	Bucarest, Romania	Presenter, First author (podium)	Prospective evaluation of precision multimodal gallbladder surgery navigation: virtual reality, near-infrared fluorescence, and X-ray-based intraoperative cholangiography
June 15-18, 2016	24 th International Congress of the European Association of Endoscopic Surgery (EAES)	Amsterdam, The Netherlands	Presenter, First author (podium)	Precision real-time evaluation of bowel perfusion. Accuracy of confocal endomicroscopy assessment of stoma in a controlled hemorrhagic shock model
			Presenter, First author (podium)	Impact of valve-less vs. standard insufflation on pneumoperitoneum volume, inflammation and peritoneal physiology in a laparoscopic sigmoid resection experimental model
			Presenter, co-author (podium)	Precision computer-assisted Barrett Esophagus follow-up. Relocalization of previous biopsy sites with electromagnetic tracking and time-machine patient-specific video archive

			Co-author (podium)	Augmented Reality computer-assisted navigation in hybrid interventional therapies: transparency visualization of patient-specific virtual organs motion during breathing using real-time skin tracking (Presenter: Alexandre Hostettler Ph.D)
			Co-author (podium)	3D MRI Topography of the Nerves at Risk during Pelvic Visceral Surgery (Presenter: Arthur Wijsmuller, MD)
March 16-18, 2016	Annual meeting of the Society of American Gastrointestinal Endoscopic Surgeons (SAGES)	Boston, MA, USA	First author (podium)	Superselective intra-arterial hepatic injection of Indocyanine Green (ICG) for fluorescence image-guided segmental positive staining: experimental proof of the concept (Presenter: Yu-Yin Liu, MD)
March 16-18, 2016	Annual meeting of the Society of American Gastrointestinal Endoscopic Surgeons (SAGES)	Boston, MA, USA	Co-Author (podium)	Robust Augmented Reality registration method for Localization of Solid Organs' Tumors Using CT-derived Virtual Biomechanical Model and Fluorescent Fiducials (Presenter: Seong-Ho Kong, MD, Ph.D)
June 3-6, 2015	23rd International Congress of the European Association of Endoscopic Surgery (EAES)	Bucharest, Romania	First author (podium)	In-vivo Immunohistochemistry: tissue-specific fluorescent probes for real-time sentinel node evaluation using confocal endomicroscopy.
				Novel laparoscopic narrow-banding imaging for real-time detection of bile leak during hepatectomies. Proof of the concept in a porcine model.
April 15-18, 2015	Annual meeting of the Society of American Gastrointestinal Endoscopic Surgeons (SAGES)	Nashville, Tennessee, USA	First author (podium)	Emerging Technology Session: HIGH INTENSITY FOCUSED ULTRASOUND (HIFU) FOR SUBMUCOSAL GASTROINTESTINAL TISSUE ABLATION

18-22 October 2014	United European Gastroenterology Week (UEGW)	Vienna, Austria	First author (podium)	ESOPHAGEAL COVERED STENT FIXATION USING AN ENDOSCOPIC OVER-THE-SCOPE CLIP. MECHANICAL PROOF OF THE CONCEPT AND FIRST CLINICAL EXPERIENCE.
18-21 September 2014	Academy for Surgical Research	Minneapolis, USA	First author (podium)	IMPROVING ECHO-GUIDED PROCEDURES USING A 4D ULTRASOUND WITH IMAGE FUSION SYSTEM
June 2014	European Association of Endoscopic Surgeons (EAES)	Paris, France	Co-Author (podium)	1) ENDOSCOPIC FULL THICKNESS SUTURING WITH AN ENDOSCOPIC SUTURING DEVICE ON PORCINE SIGMOID COLON (Presenter: Peter Halvax MD) 2) ENDOLUMINAL FULL-THICKNESS SUTURE REPAIR OF GASTROTOMY: A SURVIVAL STUDY (Presenter: Peter Halvax MD)
April 2-5, 2014	Society of American Gastrointestinal Endoscopic Surgeons (SAGES)	Salt Lake City, Utah, USA	First author (podium)	REAL-TIME NAVIGATION BY FLUORESCENCE-BASED ENHANCED REALITY FOR PRECISE ESTIMATION OF FUTURE ANASTOMOTIC SITE IN DIGESTIVE SURGERY
April 2-5, 2014	Society of American Gastrointestinal Endoscopic Surgeons (SAGES)	Salt Lake City, Utah, USA	First author (poster)	PROBE-BASED CONFOCAL LASER ENDOMICROSCOPY AND FLUORESCENCE- BASED ENHANCED REALITY FOR REAL- TIME ASSESSMENT OF INTESTINAL MICROCIRCULATION IN A PORCINE MODEL OF SIGMOID ISCHEMIA
26-29 June, 2013	Computer Assisted Radiology and Surgery (CARS)	Heidelberg, Germany	Co-author and co- presenter (podium)	AUTOMATED AUGMENTED REALITY FOR LAPAROSCOPIC SURGERY (Co-presenter, Stephane Nicolau PhD)

19-22 June, 2013	European Association for Endoscopic Surgery (EAES)	Vienna, Austria	Presenter (podium)	<p>1) 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)</p> <p>2) IRON METABOLISM AFTER ROUX-EN-Y GASTRIC BYPASS OR SLEEVE GASTRECTOMY. RESULTS FROM A PROSPECTIVE RANDOMIZED CLINICAL TRIAL</p> <p>3) A MODULAR MAGNETIC ANASTOMOTIC DEVICE FOR MINIMALLY INVASIVE DIGESTIVE ANASTOMOSIS. PROOF OF CONCEPT AND PRELIMINARY DATA IN THE PIG MODEL</p> <p>4) IMPACT OF ROUX-EN Y GASTRIC BYPASS VS. SLEEVE GASTRECTOMY ON VITAMIN D METABOLISM: SHORT TERM RESULTS FROM A PROSPECTIVE RANDOMIZED CLINICAL TRIAL</p>
19-22 June, 2013	European Association for Endoscopic Surgery (EAES)	Vienna, Austria	Co-Author (podium)	FEASIBILITY AND RELIABILITY OF PANCREATIC CANCER STAGING USING A NEW CONFOCAL NON FLUORESCENCE MICROSCOPY PROBE: A DOUBLE BLIND STUDY IN RATS (Presenter: Vivian <u>De Ruijter</u>)

12 June, 2013	Swiss Society of Surgery annual meeting	Berne, Switzerland	First author (podium)	INSTANT CAPILLARY LACTATES TO EVALUATE BOWEL ISCHEMIA: PROOF OF CONCEPT IN A PORCINE MODEL
May 5 –8, 2013	International Anaesthesia Research Society (IARS)	San Diego, CA, USA	First author (poster and oral)	1) OXYGRAPHIC ASSESSMENT OF MITOCHONDRIA RESPIRATORY RATE KINETICS IN A PORCINE MODEL OF SMALL BOWEL ISCHEMIA 2) INSTANT CAPILLARY LACTATES TO EVALUATE BOWEL ISCHEMIA: PROOF OF CONCEPT IN A PORCINE MODEL
April 16 –20, 2013	Society of American Gastrointestinal Endoscopic Surgeons (SAGES)	Baltimore, MD, USA	Co-Author (podium)	1) AGE INFLUENCE ON WEIGHT LOSS AND GLYCOL-LIPID PROFILE AFTER LAPAROSCOPIC SLEEVE GASTRECTOMY: EXPERIENCE WITH 308 CONSECUTIVE PATIENTS (PRESENTER: YOSHI NAGAO MD, PHD) 2) REVISIONAL SURGERY AFTER FAILED ADJUSTABLE GASTRIC BANDING: INSTITUTIONAL EXPERIENCE WITH 90 CONSECUTIVE CASES (PRESENTER KENG-HAO LIU)
October 20-24, 2012	United European Gastroenterology Week (UEGW)	Amsterdam, The Netherlands	Co-Author (podium)	A NOVEL STEERABLE GRASPER TO FACILITATE GASTRIC ENDOSCOPIC SUBMUCOSAL DISSECTION (ESD): A RANDOMIZED COMPARATIVE STUDY IN A PORCINE MODEL (PRESENTER HYUNSOO CHUNG MD)
27-28 August, 2012	Swiss Society of Biomedical Engineering Annual meeting (SSBE)	Lausanne, Federal Polytechnic School, Switzerland (EPFL)	First author (podium and poster)	FLUORESCENCE BASED AUGMENTED REALITY TO ASSESS INTESTINAL PERFUSION

March 7 – 10, 2012	Society of American Gastrointestinal Endoscopic Surgeons (SAGES)	San Diego, CA, USA	Co-author (podium)	1) MANAGEMENT OF STAPLE LINE LEAKS AFTER SLEEVE GASTRECTOMY IN A CONSECUTIVE SERIES OF 378 PATIENTS (PRESENTER MICHEL VIX) 2) GLOBALIZATION OF UNDERGRADUATE SURGICAL EDUCATION: A UNIQUE EDUCATIONAL EXPERIENCE AT THE IRCAD FRANCE (PRESENTER VIVIAN DE RUJITER)
7-10 May 2011	21 st EECMID	Milan, Italy	Presenter (poster)	The surgeon as an independent risk factor for Surgical Site Infections
20-25 October, 2011	United European Gastroenterology Week (UEGW)	Stockholm, Sweden	Presenter (podium)	1) Transrectal viscerotomy closure using transanal endoscopic suture vs. circular stapler: a step toward NOTES® 2) MAGNAMOSIS IV: magnetic compression anastomosis for minimally invasive colorectal surgery
May 2011	IEEE International Conference on Robotics and Automation (ICRA 2011)	Shanghai, China	Co-author	GyroLock – First In Vivo Experiments of Active Heart Stabilization Using Control Moment Gyro (CMG) Presenter J. Gagne
March 30 - April 2, 2011	Society of American Gastrointestinal Endoscopic Surgeons (SAGES)	San Antonio, TX	Co-author	Prospective evaluation of peritoneal fluid contamination following transabdominal vs. transanal specimen extraction in laparoscopic left- sided colorectal resections (Presenter: Federico Costantino)
13 November, 2010	Surgical Innovations Conference	Bastrop, Texas, USA	First author (podium) but not presenter	TOTALLY ENDOSCOPIC MAGNETIC ENTERAL BYPASS BY EXTERNAL GUIDED RENDEZ-VOUS TECHNIQUE (PRESENTER JAMES WALL)

October 2010	United European Gastroenterology Week (UEGW)	Barcelona, Spain	First author (poster)	IMPACT OF PREOPERATIVE ARTERIAL EMBOLIZATION ON ANASTOMOTIC LEAKAGE AND OVERALL COMPLICATIONS AFTER ESOPHAGEAL RESECTION
2-4 Sept 2010	Swiss Society of Hospital Hygiene	Lausanne, Switzerland	First author (podium)	THE SURGEONS' IMPACT ON SURGICAL SITE INFECTIONS IN COLON SURGERY. WHAT SURGEONS (SHOULD) DO.
May 2010	Swiss Society of Surgery annual meeting	Interlaken, Switzerland	First author (podium)	1) MEASURES TO PREVENT SURGICAL SITE INFECTIONS 2) IMPACT OF PREOPERATIVE ARTERIAL EMBOLIZATION ON ANASTOMOTIC LEAKAGE AND OVERALL COMPLICATIONS AFTER ESOPHAGEAL RESECTION
November 2003	3° Congress of the European chapter of the American College of nutrition	Gottingen	Co-author (podium)	Prevalence of essential hypertension and metabolic syndrome in "lean" NAFLD patients (Presenter: Luca Miele)