



M1.1: Laparoscopy and Robotics: Minimally invasive surgery in General Surgery

Carlos Vaz, M.D. – Course Coordinator

PRESENT SITUATION (since May 2016)

Hospital Cuf Infante Santo

Cuf Oncology Institute

Hospital Cuf Porto

Current position

- General Surgery consultant
- Head of the Robotic Surgery Unit
- Head of the Colorectal Cancer Unit at the CUF Oncology Institute
- Head of the Center for the Treatment of Obesity and Metabolic Diseases

EXPERIENCE

- 2007 – April 2016: Consultant General Surgeon at the Hospital da Luz – Lisbon, where he had the following positions:
 - Co-direction of the General Surgery Department (2007 - 2014)
 - Head of the Center of Colorectal Diseases (2007 – April 2016)
 - Head of the Colorectal Cancer Unit (October 2015 – April 2016)
 - Head of the Minimally Invasive Surgery Center (2007 – 2011)
 - Head of the Robotic and Minimally Surgery Center, for General Surgery (2011 – April 2016)
 - Member of the Nutrition Commission (2007 – 2014)
- 2007 – April 2016: Consultant General Surgeon at Hospital da Luz – Clínica de Oeiras
- 2005 – 2006: Consultant General Surgeon at AZ Sint-Blasius, in Dendermonde/Belgium (Director: Prof. Jacques Himpens)
- 2002 – 2004: Consultant General Surgeon at Hospital de S. Francisco Xavier, Hospital dos SAMS and Hospital CUF Descobertas, all in Lisbon/Portugal

EDUCATION

- 1996 – 2001: General Surgery residency at Hospital de S. Francisco Xavier, Lisbon
- 1993 – 1995: General Surgery residency at Hospital de Sta. Maria, Lisbon
- 1991 – 1992: General training at Hospital de S. João, Oporto
- 1984 – 1990: Medical Doctor at Faculdade de Medicina da Universidade do Porto, Oporto

AREAS OF SPECIAL INTEREST

Robotic and minimally invasive surgery

- Performs in a regular basis, since the early 2000s, most of the general surgery procedures using laparoscopy, including advanced procedures such as adrenalectomy, hiatal hernia repair, inguinal hernia repair, bariatric surgery and colorectal surgery
- Performed the first robotic operation for General Surgery in Portugal
- Performed the first robotic gastric bypass in the Iberian Peninsula
- Proctored the first robotic bariatric operation in United Kingdom (Imperial College, London)
- Directs and runs the highest volume robotic bariatric and metabolic surgery program in Europe, since 2010



- Overall, performed more than 3500 operations by laparoscopic or robotic surgery
- Bariatric and metabolic surgery
- Since the early 2000s, with Prof. Jacques Himpens, pioneered some bariatric procedures
 - Since 2005, joined Prof. Jacques Himpens (Director) in Dendermonde, Belgium; this center, with this two surgeons team, was at that time the busiest surgical obesity center in Europe.
 - Returned to Portugal in 2007, set up the Center for the Treatment of Obesity in Hospital da Luz (2007) and the Center for the Treatment of Obesity and Metabolic Diseases in Hospital CUF Infante Santo (2016), performing by a minimally invasive approach all the internationally recognized operations for the treatment of obesity and diabetes - Roux-en-Y gastric bypass, sleeve gastrectomy, duodenal switch, Scopinaro operation and ileal interposition
 - Performed more than 2500 of those operations, including around 1500 laparoscopic and 400 robotic Roux-en-Y gastric bypasses.

Colorectal surgery

- Attended the Postgraduate Teaching Term in colorectal surgery at St. Mark's Hospital, London, 1999, for three months.
- Set up the Coloproctology Unit at the Hospital de S. Francisco Xavier, in Lisbon
- Set up the Colon Institute in Lisbon
- Set up the Coloproctology Outpatient Clinic in Hospital da Luz
- Performed more than 300 colorectal operations for cancer by minimally invasive (laparoscopic and robotic) means.

CAREER – ACADEMIC AND SCIENTIFIC

- Invited faculty, as lecturer or moderator, in several national and international symposia and congresses.
- Invited to perform live surgery on a regular basis, in several international symposia and congresses. He performed two live robotic gastric bypass during the world International Federation for the Surgery of Obesity and Metabolic Diseases (IFSO) Congresses, held in Istanbul in 2013, and in Madrid in 2019.
- Organized and co-directed (with Dr. Nilton Kawahara and Prof. Jacques Himpens) the international symposium *BEST – Bariatric Endoscopic Surgery Trends in 2010*, in Lisbon.
- Organized and co-directed (with Dr. Keith Kim and Prof. Jacques Himpens) the international symposium *LEAPING FORWARD 2014 – Robotic and Minimally Invasive Surgery*, in Lisbon.
- Organized and co-directed (with Prof. Seon-Han Kim) the *Rectal Cancer Meeting Lisbon 2015 - 1st International Edition*, in Lisbon.
- Several papers published, as author and co-author, in international journals.
- Four chapters in text books (two edited by *Springer Nature*)
- Official international proctor of *Intuitive Surgical Inc.* for robotic General Surgery.
- Faculty at the *Covidien/Medtronic Masterclass*, in Elancourt.
- Directed and ran the international course *Covidien/Medtronic Clinical Immersion* at Hospital da Luz, Lisbon, for bariatric and metabolic surgery.
- Directing and running the international course *Covidien/Medtronic Clinical Immersion* at Hospital CUF Infante Santo, Lisbon, for bariatric and metabolic surgery and for colorectal cancer surgery.
- Consultant for *Cambridge Medical Robotics*, for the *Versius* project (robotic surgery system).
- Consultant for *Medtronic* on robotic surgery, and member of the *Medtronic Robotic Colorectal Advisory Board*
- Organized and co-directed (with Dr. Nilton Kawahara) the international symposium *BEST – Bariatric Endoscopic Surgery Trends in 2017*, in Lisbon.



Marcos Gómez Ruiz MD PhD

- Trained as a General Surgeon in the Hospital Universitario San Dureta (Palma de Mallorca). Senior consultant surgeon since 2010 at the Colorectal Surgery Unit in Hospital Universitario Marqués de Valdecilla (Santander).
- Between 2010 and 2011 he was trained as an Instructor in medical simulation at the Center for Medical Simulation in Boston MIT-Harvard University. Since 2011 he has been the Director and Instructor of numerous courses in minimally invasive colorectal surgery in Hospital virtual Valdecilla. EBS0-Coloproctology certified in 2017.
- His clinical activity is mainly focused on the treatment of colorectal cancer and inflammatory bowel disease.
- The team in Valdecilla started the Robotic Colorectal Surgery program in late 2010 and has performed around 1000 colorectal robotic procedures so far, becoming the only Intuitive Surgical Colorectal Epicenter in Spain.
- Marcos Gómez Ruiz is a member of the ESCP Educational Committee and is the research coordinator for MIRCAST Study.

Rui Ribeiro, MD

- Coordinator of the "Metabolic Unit" and "General Surgery Department" in Clínica de Santo António - Lusíadas.
- Experience in laparoscopic surgery mainly metabolic surgery techniques, both primary and revisional cases.

Currently:

- President of the SPCO for 6 years, now President of the General Assembly.
- Member of the IFS0-EC Information and Development Committee.
- Member of the HTC and "Chair of the International executive affairs" of the same Association.
- Member of the Faculty of the CCMJU (training center in Caceres, Spain) and the Ircad (France).
- Proposes the "Long pouch gastric bypass" as a bariatric technique for patients with gastroesophageal reflux issues previously to the metabolic intervention.
- Research focuses on new surgical techniques like MGB-0AGB, SASI and Sleeve-Nissen.

Juan Santiago Azagra-Soria

- Lecturer, Honorary Consultant and Expert in Digestive and Minimally Invasive Surgery
- Master of Training in Surgery of the Ministry of Health in Belgium, Luxembourg
- Honorary Citizen of the City of Nice (France) in 2005
- Head of Department and Master of General and Minimally Invasive Surgery Internship (Laparoscopy & Robotic) Centre Hospitalier of Luxembourg (Luxembourg)

Education and Training

- 1971: Secondary Education in Tudela (Spain), Jesuit College of St Francisco Javier
- 1980: Graduated Doctor of Medicine in Brussels (Belgium), Free University of Brussels
- 1986: Graduate General Surgery, Free University of Brussels and Belgian Ministry of Social Sciences and Health of Belgium
- 1986: Resident surgeon (Abdominal and Digestive surgery] University Hospital Brugmann in Brussels (Belgium)
- 1987-2003: Head of Department of Digestive Surgery, Endocrine and Minimally-



- Invasive, University Hospital André Vésale in Charleroi (Belgium)
- 2003-2009: Head of Digestive and Endocrine Multidisciplinary Unit (U.M.A.D.E.), Centre Hospitalier of Luxembourg (Luxembourg)
- 2009-2016: Surgeon and Master of Surgery Internship, Centre Hospitalier of Luxembourg (Luxembourg)
- 2016 - Currently: Head of Department of General Surgery and Urology Centre Hospitalier de Luxembourg

Member of the:

- Société Royale Belge de Chirurgie
- Société Royale Belge de Gastroentérologie
- Fellow International College of Surgeons
- Sociedad Española de Cirugía Laparoscópica
- European association of endoscopic surgery (E.A.E.S)
- Asociación Latino Americana de Cirugía Endoscópica (A.L.A.C.E)
- Asociación Española de Cirujanos (A.E.e)
- College Médical du Luxembourg
- Société Luxembourgeoise de Chirurgie
- International Association of Surgeons and Gastroenterologists

Scott A. Shikora, MD, FACS

Scott Shikora, MD, FACS, FASMBS is a board-certified general surgeon who has been involved in minimally invasive general and bariatric surgery for over 25 years. He attended medical school at Columbia University College of Physicians & Surgeons and completed his surgical residency and Nutrition Support fellowship at New England Deaconess Hospital in Boston. He then spent the next four years as a major and staff surgeon in the United States Air Force.

Dr. Shikora worked at Tufts Medical Center in Boston for over 16 years where he was the Director of the Weight and Wellness Center, and Chief of the Divisions of Bariatric and General Surgery. During his tenure at Tufts Medical Center, he was also a Professor of Surgery at Tufts University School of Medicine. Currently, he is a Professor of Surgery at Harvard Medical School and the Director of the Center for Metabolic and Bariatric Surgery at Brigham and Women's Hospital in Boston.

Dr. Shikora is a member of several medical societies and he was active in committees and leadership. He is a Past President and former Board of Directors member of the *American Society for Parenteral and Enteral Nutrition*. He was also both a Past President and a former Executive Council member of the *American Society for Metabolic and Bariatric Surgery*. He currently is on the Executive Council and several committees of the *International Federation for the Surgery of Obesity and Metabolic Disorders*.

Dr. Shikora is an Associate Editor of the surgical journal *Surgery for Obesity and Related Diseases* and the current Editor-in-Chief of *Obesity Surgery*. Dr. Shikora has authored numerous book chapters and journal publications and has made hundreds of international and national presentations on bariatric surgery and nutrition support topics. He also developed and directs the *Bariatric Summit*, an annual American bariatric conference and two international meetings held in Israel, *The World Congress for the Advancement of Surgery and the International Obesity and Metabolic Surgery Summit*.

Dr. Shikora has won numerous awards. In 2011, he was awarded the Distinguished



Alumni Award from his alma mater, Muhlenberg College. In 2015 he was given the ASMBS Foundation Outstanding Achievement Award. In 2017, he was honored with the President's Award from the International Federation for the Surgery of Obesity and Metabolic Disorders and the Albert Nelson Marquis Lifetime Achievement Award from Marquis Who's Who. He has been recognized by Castle Connolly as one of America's Top Doctors from 2005-2018 and Boston Magazine's Top Doctors from 2008-2018.

Dr. Scott Shikora lives in Sharon, Massachusetts with Susan, his wife of 34 years. He has 3 children; Jonathan, Katie, and Samuel.

Seon-Hahn KIM, MD, PhD, FACS

Dr. Kim is Professor of Colorectal Division, Department of Surgery and Director of the Cancer Center, Korea University Anam Hospital, Korea University College of Medicine, Seoul, Korea. He is specifically interested in minimally invasive colorectal surgery during the past 20 years. He obtained research fellowship at Department of Colorectal Surgery of the Cleveland Clinic Foundation, Cleveland, OH in 1995-97 and received the Outstanding Surgical Research Fellow Award.

Prof. Kim has performed more than 3000 laparoscopic colon and rectal resections, mainly for cancer. He started robotic colorectal surgery in late 2007. He developed a single-docking fully-robotic low anterior resection and performed over 850 cases. He has been doing many live robotic and laparoscopic surgeries at various international congresses and overseas hospitals. He is honored to give several orations such as; the 'BJS Lecture' titled "Minimally invasive complete mesocolic excision" at the 2015 Congress of European Society of Coloproctology in Dublin, the very first 'Yasunobu Tsujinaka Memorial Oration' titled "Current status of robotic colorectal surgery" at the 27th Annual Jagelman/ 37th Turnbull International Colorectal Symposium 2016 held in Florida, a Keynote Lecture at the 2018 Royal Australasian College of Surgeons (RACS) 87th Annual Scientific Congress in Sydney, Australia, and 'The William Hugh Isbister Lecture' titled "Deloyers Procedure" at the 2019 Saudi-International Colorectal Diseases Forum in Riyadh, Saudi Arabia.

Prof. Kim was the Founding President of Korean Association of Robotic Surgeons (KAROS, 2013-15] and the Chairman of the Korean Society of Endoscopic and Laparoscopic Surgeons (KSELS, 2014-16]. He was awarded the Yeoh Ghim Seng Professor of Surgery by National University of Singapore (2008-14], and Dr. Anthony PC Yim Professorship in Minimally Invasive Surgery and Innovative Technology by Chinese University of Hong Kong (2011] .He has also been invited as visiting professor/scholarship worldwide, including Royal Brisbane Hospital in Australia (11], National Cheng Gong University in Taiwan (12,15], Kumamoto University in Japan (13], Karolinska Institute Hospital in Stockholm, Sweden (15, 17], and University of Western Sydney, Australia (18-23].

Salvador Morales-Conde, MD, PhD

- Chief of the Unit of Innovation in Minimally Invasive Surgery of the University Hospital "Virgen dei Rocío"
- Head of the General, Digestive and Laparoscopic Surgery Unit of the Hospital OuirónSalud Sagrado Corazón in Sevilla (Spain).
- Associate Professor of the Department of Surgery at the University of Sevilla (Spain)
- PhD Degree by the University of Sevilla
- Visiting Professor of the School of Medicine at the Northeastern National University



- (Argentina)
- Visiting Professor of the Training program of Surgery of Malta
 - Faculty of the IRCARD/EITS in Strasburg (France) and in Barretos (Brazil)
 - Faculty of the Italian School of Abdominal Wall Surgery
 - Academic Fellow of the Royal Academy of Medicine of Sevilla and Lugo (Spain)
 - Honorary member of the Society of Surgery of Cuba, Venezuela and Club Hernié (French Society of Abdominal wall)
 - Certificate in Laparoscopic Visceral Surgery by the Louis Pasteur University of Strasbourg (France)
 - University Expert on Laparoscopic and Minimally Invasive Surgery by University Complutense of Madrid
 - Expert in Obesity Surgery by SECO (Spanish Society of Obesity Surgery)
 - President Elect of the Spanish Association of Surgeons (AEC)
 - President of the Spanish Chapter of Endoscopic Surgery of the AEC (2010 to 2014)
 - President of the Spanish Chapter of Abdominal Wall Surgery of the AEC (2006 to 2010)
 - Board Member of the Spanish Society of Obesity Surgery (SECO) (2016-2020)
 - General Secretary of the European Hernia Society (EHS)
 - Secretary of Education of European Hernia Society (EHS) (2012-2014)
 - President Elect of the European Association of Endoscopic Surgeons (EAES)
 - Board Member of the Technological Committee of the European Association of Endoscopic Surgeons (EAES) (2012-2016)
 - President of the European congress of the European Hernia Society (EHS) in 2008.
 - President of the European congress of the European Association of Endoscopic Surgeons (EAES) in 2019.
 - Co-chairman of the International Congress of the EHS and AHS- Miami 2018
 - Co-chairman of the International Congress "State of the art in hernia Surgery" in 2018 (Lviv, Ukraine)
 - Honorary President of Mesh 2018 (Official Congress of Club Hernie) (Paris, France)
 - Honorary President of the Congress of the Portuguese Society of Minimally Invasive Surgery 2019
 - Director of the Training program of endoscopic surgery of the Spanish Association of Surgery.
 - Director of Research of the Royal College of Medicine of Sevilla (2013-2017)
 - President of the Expert Committee of the Royal College of Medicine of Sevilla (from 2018)

Manoel Galvao Neto, MD

- Scientific Director at Endovitta Institute Sao Paulo, Brazil
- Affiliate Professor of Surgery at ABC College of Medicine, Santo Andre, São Paulo, Brazil
- Chairman of Bariatric Endoscopy Committee at the International Federation for Surgery of Obesity - IFSO
- Advisory Board Member of the Association of Bariatric Endoscopy - ABE (ASGE division)
- Chairman of Bariatric Endoscopy nucleus at Brazilian Society of Metabolic and Bariatric Surgery - SBCBM
- Recipient of the "Innovation Award" by ASBMS in 2015
- Committee member at SAGES, ASGE, ASMBS and IFSO
- Editorial Board member of Obesity Surgery, Surgical Laparoscopy Endoscopy & Percutaneous Technique, Bariatric Times and Archives of Gastroenterology



- Scientific Director of EndoVitta institute, Sao Paulo, Brazil
- Director of Innovation at International Bariatric Club- IBC
- Board certified specialist in Digestive Surgery, Gastroenterology and Digestive Endoscopy
- Master degree in Digestive Surgery by Sao Paulo University
- International Fellow of ASMBS

Jacques Himpens, MD, PhD

- Born in Belgium on February 15, 1953 is an associate professor of surgery at the European School of Laparoscopic Surgery (director: GB Cadiere) and chief of bariatric surgery at the CHIREC hospital, Brussels, and the St Blasius general hospital, Dendermonde, Belgium.
- He performed the first laparoscopic nephrectomy in Belgium, 1994.
- On March 3, 1997 he performed the world's first "robotic" laparoscopic cholecystectomy with the Intuitive Surgery "Mona" prototype.
- He performed the first laparoscopic gastric bypass in Belgium in 1999 and the first laparoscopic sleeve gastrectomy, and the first biliopancreatic diversion with duodenal switch in 2001.
- Starting 2003, he performed close to 2000 laparoscopic bariatric procedures a year.
- He has performed over 15000 laparoscopic obesity procedures, many of them revisional.
- He promoted to the doctor's degree with a thesis "Adjustable Gastric Band, Sleeve Gastrectomy and Roux-en-Y gastric bypass by laparoscopy: long term outcomes and strategies in case of failure". He published over 150 articles in peer reviewed medical journals, authored a substantial number of chapters in surgical and bariatric books and co-edited four books on bariatric surgery.
- He is co-editor for the "Obesity Surgery" journal and a member of the editorial board of "SOARD".
- He is president-elect (2017- 2018] of IFSO

Filip Muysoms, MD

- Born in Ghent, Belgium in 1965, graduated from the Medical School at the University of Ghent in 1990.
- Training in General surgery at Baragwanath Hospital, Johannesburg in South Africa and at the AZ Maria Middelaes Hospital in Ghent: 1990-1998
- Training in General Thoracic Surgery at the St Antonius Hospital, Nieuwegein in The Netherlands: 1995
- Certified Intensive Care specialist training at the University Hospital in Ghent: 1999.
- Doctor in the Biomedical Sciences: PhD thesis was successfully defended at the Ghent University in May 2015: Title: "Prevention of incisional hernias." promotor Frederik Berrevoet.
- Since May 2017 proctoring for robotic abdominal wall surgery
- Currently working as Head of the Department of General and Abdominal Surgery at the Maria Middelaes Hospital in Ghent.
- Has developed a specific focus in practice and in science on abdominal wall hernias and on the adoption of robotic assisted surgery in Europe.
- Board Member and Past-President (2008-2010) of the Belgian Section for Abdominal Wall Surgery.



- First author of the "Classification of primary and incisional abdominal wall hernias" of the European Hernia Society, 2009 and of the guidelines on closure of abdominal wall incisions.
- Congress President of the 33th International Congress of the European Hernia Society in Ghent: May 2011.
- Founding president of the EuraHS, the European Registry for abdominal wall hernias: 2011.
- European Hernia Society Board Member since 2013, currently Secretary of science and upcoming president elect.
- Member of the Scientific Committee of the European Association for Endoscopic Surgery, 2015- 2018.