

ST MARK'S
HOSPITAL
FOUNDATION

A future free from the
fear of bowel disease

Welcome to the Future of Surgery: Robotics

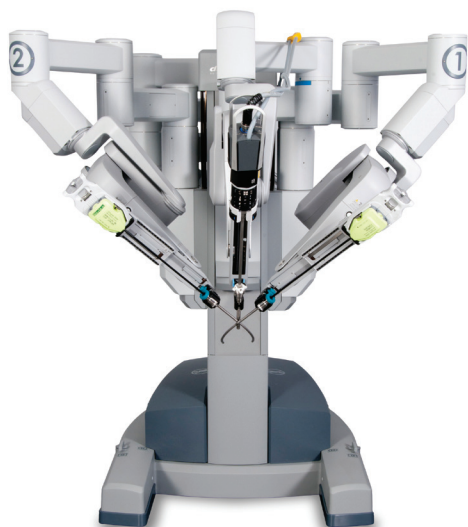
*St Mark's Hospital Foundation's Surgical Robotics Programme
for the treatment of bowel disease*

An initiative of St Mark's Institute for Bowel Disease





A surgeon at the robot's operating console



The patient's cart







A surgical robot in operation

St Mark's Hospital, a World Centre of Excellence

St Mark's Hospital was founded in 1835 as the world's first specialist bowel disease hospital and, today, it is a national referral centre for patients with the most complex forms of bowel disease. The vision of St Mark's Hospital Foundation is to create a world free from the fear of bowel disease through a dedication to research, education and the dissemination of clinical best practice, nationally and internationally.

St Mark's Institute for Bowel Disease

To ensure that St Mark's continues to intensively develop the expertise to treat even more complex bowel diseases and find new cures, it launched St Mark's Institute for Bowel Disease in 2015. The Institute is being built on four pillars which St Mark's has been developing over several years. These pillars are:

-  Dedicated research teams that develop new treatments, translate them into clinical care and educate to disseminate best practice.
-  The attraction of a critical mass of expertise able to develop international research collaborations.
-  The provision of the most advanced systems and technology, including robotics, the provision of advanced imaging and sophisticated endoscopic equipment.
-  A purpose-built physical environment to house research and education teams, which supports the interactions within the Institute that make it so unique.

St Mark's has made great progress in building up the first two pillars, and we now look to acquire and deploy the most advanced systems and technology, especially surgical robotics.

The core objectives of our Surgical Robotics Programme

Objective 1: Establish a National and International Hub for research and education in robotic colorectal surgery. A Hub is needed to avoid a future shortage of expertly trained robotic surgeons.

Objective 2: Establish a functional and sustainable service to offer robotic surgery to eligible cancer patients.

Objective 3: Explore other areas of colorectal disease (IBD and pelvic floor disorders) to improve surgery by implementing robotics.

How patients may benefit from robotic surgery

While there is evidence to support the belief that there are benefits of robotic surgery compared to open and keyhole surgery, the evidence is not yet overwhelmingly conclusive. Robotic surgery promises to reduce the rate of blood loss during surgery, reduce tissue damage and the recovery time for patients. A lower conversion rate, which is the avoidance of the operation beginning as a minimally invasive robotic procedure and needing to convert to open surgery, is very important as open surgery carries much higher risks to the patient with approximately 50% of open surgery leading to complications as well as poorer long term health outcomes.

There are signs that the benefits of robotic surgery are there, but the evidence is still evolving and St Mark's Hospital wishes to play a leadership role in this exciting area of research.

Why robotic surgery may achieve greater benefits for patients

There are three technical reasons why robotic surgery may achieve greater benefits for patients:

Flexibility

There is greater flexibility of the surgical instrument.

Miniaturisation

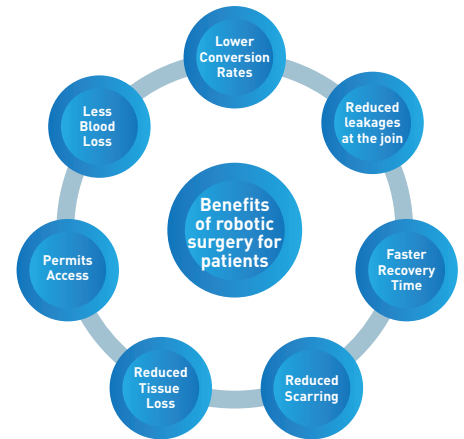
Miniaturisation of large movements by the surgeon outside the patient's body that are converted into fine and precise movements within the patient's body.

Visualisation

A high definition, magnified 3D version of the operating field allows the surgeon to work with utmost precision.

St Mark's commitment to establishing robotic surgery for bowel disease nationally

Mr Danilo Miskovic is an experienced robotic surgeon. Mr Miskovic and his surgical colleagues from St Mark's are committed to playing a leading role in establishing robotic surgery for bowel cancer patients in the UK and internationally. They will do this primarily through training surgeons from throughout the UK.



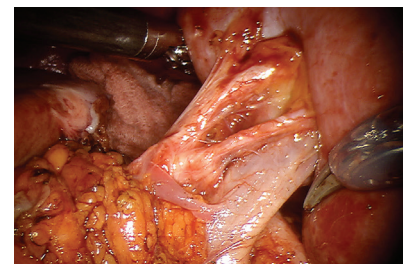
Potential benefits of robotic surgery



Flexibility



Miniaturisation



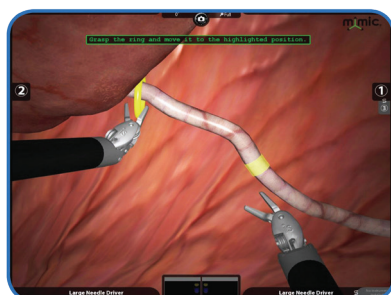
Visualisation



Mr Danilo Miskovic



Robotic Training Simulator giving the surgeon an evaluation of their performance to improve their skills



Surgical robot assessment and feedback to trainee

The financial need

A Surgical Robotic System costs £2 million and as of November 2018 St Mark's Hospital Foundation has raised £470,000 towards this target from well-known philanthropists, charitable trusts & foundations and grateful patients of St Mark's Hospital. This funding enabled St Mark's Hospital Foundation to reach its first campaign milestone and the Hospital took delivery of a Da Vinci Xi surgical robot in March 2018 from the industry leader, Intuitive Surgical Inc. On average, St Mark's Hospital Foundation raises £1.8million per annum for a wide variety of research projects, including the development, implementation and uptake of newly developed technologies and innovative surgical techniques. These are areas of critical importance in medical practice and St Mark's has a long history of pioneering breakthroughs since 1835. The plan is to continue our strategic approach to fundraising and focus the majority of our resources on our Surgical Robotics Programme with the support of loyal donors and new contributors donating at all levels of giving.

The future of surgery is robotics. The future is in your hands.

Sponsorship opportunities

To support this appeal, please contact Jason Bacon, CEO, on (020) 8235 4042 or at jason.bacon1@nhs.net



A future free from the fear of bowel disease

St Mark's Hospital Foundation

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St Mark's Hospital Foundation is dedicated to bringing about a future free from the fear of bowel disease through Research, Education and Dissemination of Clinical Excellence