

# TRAVELLING SCHOLARSHIPS 2010-2016



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SHARING EXPERTISE

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# Ms Cynthia-Michelle Borg MD FRCS

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In March 2011, thanks to the B. Braun Aesculap Travelling Scholarship, I was able to visit the Centre for Adolescent Bariatric Surgery at the Morgan Stanley Children's Hospital of New York-Presbyterian and to attend the Second World Congress on Interventional Therapies for Type 2 diabetes (T2D) in New York.

The prevalence of morbid obesity in adolescents and young adults has increased in the last two decades mirroring the rise in morbidly obese adults. These younger patients have decreased life expectancy and increased physical morbidity when compared to their non-obese counterparts. They develop conditions including impaired glucose tolerance, T2D, hypertension, dyslipidaemias, heart disease, sleep apnoea and degenerative joint disorders that one would usually associate with much older individuals. Teenagers with morbid obesity also have a higher incidence of low self-esteem, depression, anxiety and other psychological problems. The majority of obese adolescents remain obese as adults.

Bariatric surgery in adolescents is still somewhat controversial as the long-term results and consequences on growth have not been fully elucidated.

management and education are offered not only the adolescents themselves but to the entire family, care givers and often the schools they attend. I was able to be part of the multi-disciplinary team reviewing and assessing these patients. The goal of the team is to help patients lose weight without surgery if possible. Patients who fail to lose 20% of their excess weight after six months and are considered to be able to understand and comply with the post-operative changes would be considered for surgery.

The two bariatric operations performed in the centre are laparoscopic adjustable gastric banding and sleeve gastrectomy. As the band is not licensed for use in adolescents, laparoscopic adjustable gastric banding was being performed under guidelines approved by the FDA and Columbia University's Institutional Review Board at the time I visited the unit. The mean pre-operative BMI for adolescents undergoing surgery at the center is 48 kg m<sup>-2</sup>. Most patients are younger than 17 years and about 40% have evidence of metabolic syndrome pre-operatively. Most of



As part of the guidelines for the management of morbid obesity, NICE advised that surgery could be considered in young people in exceptional circumstances and insisted on the importance of a multi-disciplinary approach to these patients. Although bariatric surgical operations in older and younger patients are similar, the pre-operative workup and post-operative follow-up tend to be more intense and extensive in the young.

The Morgan Stanley Children's Hospital of New York-Presbyterian has a long history and a vast experience in the management of adolescent obesity. This unit has a multi-disciplinary programme for weight management including specialists in paediatric endocrinology, nutrition, psychiatry, diabetes, surgery, gastroenterology and other specialties. In 2006, the centre became one of only a few U.S. centers approved to offer weight loss surgery to adolescents and was one of only four U.S. centers approved by the Food and Drug Administration (FDA) to evaluate the outcomes of gastric banding in this patient group.

The Medical Director for the centre, Dr Jeffrey L Zitsman, kindly allowed me to visit the unit. I was able to attend sessions with different members of the team and be involved in the pre-operative evaluation, discussions, operation and post-operative care of young adults and adolescents undergoing surgery for morbid obesity. I was made to feel very welcome by the whole team.

As part of their morbid obesity work-up, the adolescents undergo extensive health and metabolic screening, as well as bone age and bone density studies. Patients are given individualised exercise programmes and are evaluated by nutritionists and psychiatrists. Nutritional guidance, dietary

the girls also have irregular periods and polycystic ovary syndrome. Initial results show that after a year after bariatric surgery, most of the patients have lost approximately one-third of their excess body weight. Most patients show improvement in metabolic syndrome as early as 6 months post-operatively.

Patients are followed up very carefully post-operatively and any problems are carefully sought out and managed by the multi-disciplinary team. Patients are followed up for at least 5 years after their surgery. There are at least 6 visits in the first post-operative year and then continues 6 monthly thereafter.

There is ongoing research in the unit evaluating the safety and success rates of bariatric surgery and the natural history of obesity-associated conditions. They are also studying changes in metabolic parameters and gut hormones after weight loss surgery in adolescents.

Whilst in New York, I was also able to attend the Second World Congress on Interventional Therapies for T2D. This had a very interesting scientific programme with international experts in the field of bariatric surgery and T2D including Professor Francesco Rubino, Professor Sir George Alberti and Professor John Dixon. The International Diabetes Federation (IDF) position statement was published during this meeting ([www.idf.org/webdata/docs/IDF-Position-Statement-Bariatric-Surgery.pdf](http://www.idf.org/webdata/docs/IDF-Position-Statement-Bariatric-Surgery.pdf)). The position statement stated that bariatric surgery is a cost-effective therapy for T2D and obesity with an acceptable safety profile and that surgery for severely obese people with T2D should be considered much earlier in management rather than considered as a last resort.

This Travelling Scholarship has allowed me to visit a high-volume adolescent morbid obesity and bariatric centre in the USA and also attend a related World Congress in the same city. Both have been great experiences that have contributed vastly to my ongoing education and understanding of this fascinating subject. I would like to take the opportunity to thank Dr Zitsman and his team, along with the ALSGBI and B. Braun Aesculap for facilitating this fantastic visit.

**Ms Cynthia-Michelle Borg MD FRCS**

Winner of B. Braun Aesculap Travelling Scholarship 2010



# Mr Siong-Seng Liao, MA, MD, FRCS (Gen. Surg)

Laparoscopic Hepatopancreatobiliary Fellowship at the  
Department of Digestive Surgery, Institut Mutualiste Montsouris, Paris



I wish to thank the ALSGBI for the B. Braun Aesculap Travelling Scholarship that allowed my visit to Professor Brice Gayet's department at the Institut Mutualiste Montsouris in Paris. The main motivation for this visit was to gain experience in laparoscopic HPB surgery. Specifically, I wished to learn the techniques (either totally laparoscopic or laparoscopic-assisted) developed to achieve safe major liver and pancreatic resections. I embarked on this mini-fellowship during the last month of my Specialist Registrar training, and prior to taking up the Consultant HPB Surgeon post at the Addenbrooke's Hospital.

During this mini-fellowship, I witnessed a wide range of laparoscopic pancreatic and liver resections. It was a pleasure to watch Professor Gayet operate – each laparoscopic step was performed with finesse and ease. Combination of efficient movement and clear intra-operative decision making has allowed him to complete major laparoscopic resections within 4-5 hours. Professor Gayet made use of robot-assisted laparoscopy to perform each of his laparoscopic procedures – this worked very well with the robot precisely moving the laparoscope to his desired view.

My first week was intriguing. Professor Gayet performed a laparoscopic-assisted Whipple's resection for a patient with a head of pancreas mass causing obstructive jaundice. The initial 'posterior' approach to dissection with laparoscopic extended Kocherisation and extension of the posterior dissection to the origin of SMA on the right hand side. This was followed by sampling of the aorto-caval nodes and then coeliac lymph nodes to exclude metastases. Frozen section was performed on both sets of lymph nodes before proceeding further with the resection.

I further witnessed a case of laparoscopic left hepatectomy for colorectal metastases. The liver hilum was dissected clearly with a good laparoscopic view. The left pedicle was subsequently divided with precision. This was followed by the anterior approach to liver transection using a bipolar-ultrasonic device in one hand and bipolar forceps in the other. The whole operation was performed in a 'blood-less' field with minimal blood loss. I suspect the blood loss was also minimised by the low CVP and low pressure capnoeperitoneum. It was impressive to see such a procedure completed with finesse and safety, especially considering that the patient had significant steatohepatitis from previous chemotherapy.

Given that Professor Gayet was also a Professor of Anatomy, his appreciation of surgical anatomy was astounding – this has allowed him to navigate laparoscopically with ease, as for the inexperienced, laparoscopic anatomy can be rather deceiving. Professor Gayet is a meticulous surgeon

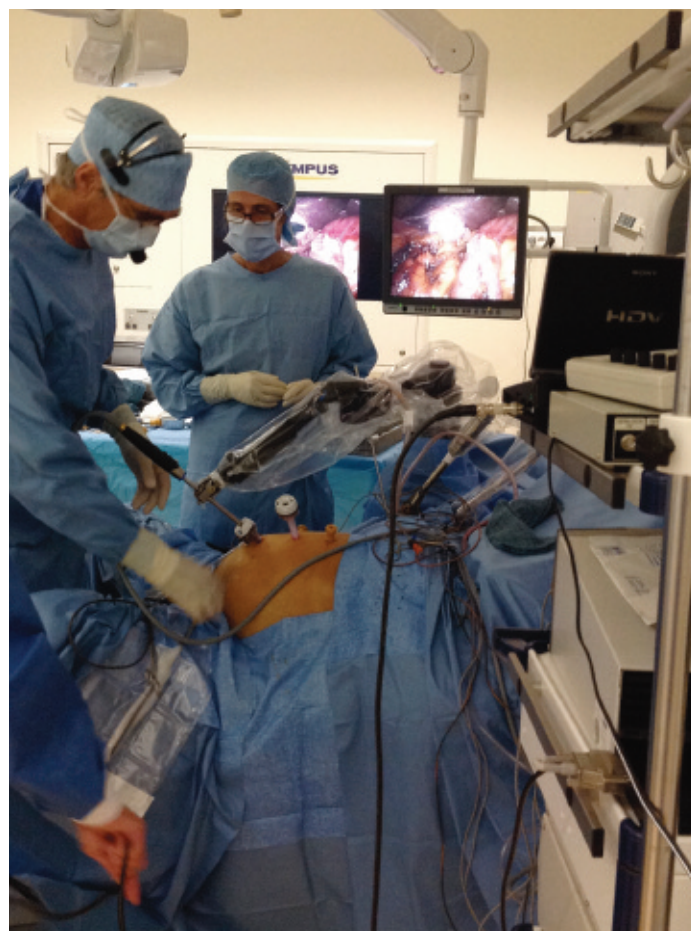
with careful haemostasis at each stage – with a right-handed harmonic scalpel and his left hand holding a laparoscopic bipolar forceps (Professor Gayet is left-handed). The bipolar forceps prove to be very handy both for gentle tissue handling and haemostasis. At times, the bipolar forceps are also handy in manual compression of any 'bleeders'.

Although I spoke little French, I was able to get-by and quickly settled into the daily routine of the unit. The experience was facilitated by the presence of other overseas visiting surgeons, all hoping to advance their laparoscopic HPB work by learning from the best! When not in the operating theatre there were few ward commitments, as the post-operative care was predominantly managed by a team of gastroenterologists experienced in caring for post-operative surgical patients. I was able to spend some time catching up on my research work. At weekends, I commuted back (via the Eurostar) to London St. Pancras followed by transfer to a train for Cambridge with a door-to-door journey time of 3 and a half hours!

In summary, I was privileged to be accepted as a visiting fellow by Professor Gayet and this experience has changed my perception of laparoscopic HPB resectional surgery. In experienced hands, these technically challenging operations can be achieved laparoscopically with a similar degree of safety as open procedures. The absence of tactile feedback in laparoscopic approach is compensated by the excellent view achieved. In the next year, I plan to make further trips to Paris to watch Professor Gayet performing further laparoscopic liver operations, in particular major resections such as extended hepatectomies. I am indebted to my surgical mentors and colleagues at the HPB Unit in Addenbrooke's Hospital (Neville Jamieson, Raaj Praseedom, Emmanuel Huguet, Asif Jah) for supporting me in this endeavour.

**Mr Siong-Seng Liao, MA, MD, FRCS (Gen. Surg)**

Winner of the B. Braun Aesculap Travelling Scholarship 2011





## Mr Robert Sutcliffe



In November 2011, I visited Seoul in South Korea on a Travelling Scholarship kindly sponsored by ALSGBI and B Braun Aesculap. My time was divided between two major hepatobiliary centres both with worldwide reputations for excellence and innovation in laparoscopic liver surgery.

There is increasing evidence that in experienced hands, laparoscopic liver resection in selected patients is safe, feasible and leads to accelerated recovery compared to open surgery. Despite initial concerns about the potential risk of major haemorrhage during laparoscopic liver resection, rather the presence of pneumoperitoneum appears to have a beneficial effect by limiting blood loss from low pressure hepatic veins. The indications for laparoscopic liver resection have gradually expanded over the past decade. Solitary tumours less than 5cm in diameter are generally considered suitable for a laparoscopic approach, particularly in the antero-inferior or left lateral segments. Resection of postero-superior segments and major resections are more challenging and are currently performed by few experienced laparoscopic liver surgeons worldwide. In the UK, the proportion of liver resections carried out laparoscopically is small, and the majority of liver surgeons with a laparoscopic interest are currently ascending their learning curve predominantly with minor resections only. At present, therefore, it is difficult for UK surgical trainees to gain sufficient hands-on exposure to achieve independence in laparoscopic liver resection prior to consultant appointment.

I am extremely grateful to Professor Ho Seong Han (Seoul National University Bundang Hospital) and Professor Ki Hun Kim (Asan Medical Center) for their warm hospitality and for giving me such a fantastic opportunity to learn from their vast experience. Professor Han is a genuine innovator in the field of laparoscopic liver surgery, having performed numerous major hepatectomies, including laparoscopic adult-to-adult live donor right hemihepatectomy, laparoscopic right posterior sectionectomy and laparoscopic central bisectionectomy, all extremely challenging procedures even for experienced open surgeons.

With 400 liver transplants performed annually, the Asan Medical Center (AMC) is the home of the world's largest liver transplant programme, attracting scores of visiting surgeons to learn from their extensive experience of live donor transplants. Professor Kim is also an expert laparoscopic liver surgeon, having performed over two hundred cases, including more than twenty laparoscopic live donor hepatectomies and over seventy laparoscopic hemihepatectomies. During my visit, I had the opportunity to observe numerous cases, including a laparoscopic live donor left lateral sectionectomy as well as a robot-assisted laparoscopic liver resection.



Since my return to the UK, the technical aspects of laparoscopic liver resection learnt in Seoul have proved valuable in developing my own laparoscopic hepatobiliary resection practice. The most common indication for liver resection in South Korea is a small, solitary hepatoma in a thin, young patient. This is in stark contrast to the typical UK patient, who is overweight, elderly with multifocal colorectal metastases in a steatotic liver, commonly damaged by chemotherapy. In my view, it has been these differences in patient demographics that have been the most challenging to overcome, particularly during my learning curve, when patient selection is of critical importance. With nearly twenty minor laparoscopic liver resections under my belt since my scholarship, my next challenge is to master major liver resections.

### Mr Robert Sutcliffe

Winner of the B. Braun Aesculap Travelling Scholarship 2011

# Mr Will Hawkins

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After a couple of years of planning and a lot of paperwork, I travelled to Sydney with my family on the last day of 2011. Arriving from the depths of the British winter we were grateful that Sydney was having the worst summer in generations.

I was here to work on the Upper GI unit at the St George Public and Private Hospitals in Kogarah. St George Public Hospital is one of Sydney's biggest acute hospitals, providing tertiary referral services for the 200 miles of New South Wales' south coast. The Upper GI unit is run by four Visiting Medical Officers (VMOs or consultants) – Dr Michael Talbot, Dr John Jorgensen, Dr Ken Loi and Dr Vytautas Kuzinkovas, three of whom have had training in the UK. Unusually in the competitive environment of Australian healthcare, the consultants work closely together within a multi-disciplinary team at the adjacent private hospital. Together they represent probably the largest non-gastric band orientated bariatric practice in Australia and are Australia's only Bariatric 'Center of Excellence'.

The team had two fellows, Mr Gary Yee (a Sydneysider in the Australian surgical fellowship scheme) and myself. Between us we provided a 24/7 Upper GI on call for the public hospital and rotated between the public and private hospitals every three months.



I started at the public hospital and had not anticipated how much it would challenge some of the principles of my UK training. The unit's strong relationship with industry and their understanding of surgical technology influences their approach to surgical practice, with new products frequently being trialled. All laparoscopic procedures involving the hiatus are approached with the surgeon and their operating ports on the patient's right with the assistant and their ports on the left. Use of a 45 degree scope allows excellent vision and avoids instruments clashing during the procedure. Even though the change in orientation (for someone previously used to the 'French' position between the legs) does take a little getting used to, I continue to use this arrangement in my own consultant practice.

Laparoscopy was the default approach to most surgical problems, giving me experience in laparoscopic anti-reflux/hiatal surgery, ventral and groin hernias and emergency cholecystectomy (with routine cholangiography). There was a limited amount of resectional work but I was generally primary surgeon and was, unexpectedly, performing pancreatic resections independently by the end of the year.



There is very limited funding for bariatric surgery in the public sector, but the incentivised private health system offers it freely. St George Private Hospital performs around 1000 bariatric procedures annually and I was involved in around a third of these. Having evolved their protocols over the years, laparoscopic sleeve gastrectomy is now the default option for most patients, including those requiring revisional surgery after failed gastric bands. All surgeons follow a similar technique, which made it easy to learn, and there was ample opportunity for hands-on experience. Their results are exceptional, with only one leak in the year that I was with them and none reported in their series of almost 200 revisional procedures. Dr Talbot still performs a large number of gastric bypasses with a handsewn gastro-jejunal anastomosis, which was a particularly useful technique to learn. They also have a developing research portfolio which I continue to play an active part in.

Undoubtedly my year in Sydney was hard work but a professionally and personally rewarding one. I found that in Australia there really is a 'no worries' approach to challenging situations which has had a lasting effect on me.

Organising a fellowship in Australia is a tricky process but, for me and many before me, it has opened the doors that I hoped it would. In conjunction with other colleagues who have been through the process we are writing a guide to the paperwork which should appear on the ASIT website ([www.asit.org](http://www.asit.org)) in the near future.

I would like to convey my gratitude to the ALSGBI for their support through the David Dunn scholarship and to everyone that I worked with at the St George Hospitals in 2012 for making it such a memorable experience.

**Mr Will Hawkins**

Winner of The David Dunn Travelling Scholarship 2011



## Mr Andrew Davies

**B. BRAUN**  
SHARING EXPERTISE

Firstly I would like to extend my thanks to B. Braun Aesculap for enabling this Travelling Scholarship to happen. If it was not for their support, the trip would not have been possible.

To an extent, the ALSGBI Annual Scientific Meeting in 2009 was the beginning of this process as I assisted Professor Heine Van der Walt with his live operating seminar for the Tonbridge meeting. I remember the awed silence in the auditorium as he single-handedly cured the South East of England of GORD in the space of a morning.

Having developed an interest in Upper GI & laparoscopic surgery through my training, it made sense to spend some time with such an internationally renowned surgeon. My aims were to gain further exposure to re-operative hiatal surgery and advanced laparoscopic surgery, and to see how a foreign surgical practice is run.



Professor Heine Van der Walt is a remarkably talented individual, not only a very skilled surgeon, but a motorbike fanatic, mechanic and qualified computer programmer. These traits are very evident in his practice at Unitas hospital in Pretoria, South Africa. The unit that he has set up from scratch is entirely private, receiving referrals from all over South Africa and the world. He has programmed all of the computer software himself such that note taking is obsolete as every endoscopy, consultation and operation is automatically archived, letters emailed, prescriptions printed. The level of IT capability humbles that of any UK department I have worked in. The programmes are written by a clinician, so there is no unnecessary computer jargon. Every entry has a purpose, nothing is wasted.

His practice involves laparoscopic and open surgery, benign (especially reflux and bariatrics) as well as resectional. The skills he has developed in each of these are of undoubted benefit to the others. The learning curve of laparoscopic cancer resections (where an average UK surgeon may see 20-30 cases per year) could take many years to achieve, but this is accelerated rapidly by exposure to other advanced laparoscopic surgery at the hiatus or indeed bariatrics. This is especially



poignant at a time when we are pigeon-holing UGI surgeons in the UK into benign or malignant practices. The laparoscopic skills are interchangeable and indeed actively useful for both.

He employs 10 members of staff to make his practice run efficiently. Coming from the public sector in the UK it is an eye-opening experience. An average day commences with rounds at 0700, followed by a 25 patient clinic in the midst of which he performs 15-20 endoscopies. He moves between 5 clinic and endoscopy rooms. When he leaves one clinic room, the next endoscopy is lying on the bed, cannula placed ready for the procedure. There is no unnecessary administration, no red-tape just a highly efficient system geared to maximising the surgeons available time. Every afternoon he performs surgery, and an operating list typically contains 5-8 cases. These are not day case inguinal hernias however. On my first day he performed four funduplications and three re-do funduplications in an afternoon. The day after that two RY-gastric bypasses, a laparoscopic distal gastrectomy, two funduplications and a laparotomy. He has 2 theatres running in parallel and the efficiency contrast with UK theatres is stark. In a day, he covers at least the workload of 2 days of NHS time. One caveat to this is that, being private patients, he performs all of the procedures himself and therefore is not held up by training requirements. However, there is an unbelievable archive of operations, complications, international Powerpoint presentations and laparoscopic simulators to keep the trainees happy. Additionally, he never fails to find time to discuss cases and teach his four steps of laparoscopic suturing.

Theatres run until all of the cases are finished. The theatre equipment is state of the art, and very similar to that used in the advanced laparoscopic units in the UK. Each theatre has a surgical assistant, usually a local GP with an interest in surgery. The theatre sisters are "old school" nurses, the setup and discipline in the

theatre immaculate. Staff are paid by the case, everyone has an incentive to be efficient..... nobody starts looking at the clock at 4 o'clock in the afternoon wondering if the last case will be cancelled. Of course it helps that the surgeon can perform a fundoplication in less than 20 minutes and a bypass in a little over half an hour. This is partly down to individual skill, but also practice accumulated over some 12000 anti-reflux operations and 1000 bypasses. It is inconceivable that a British surgeon will ever achieve this level of experience on a schedule of one operating list per week.

Are there any downsides? Yes, a few. South Africa continues to be a relatively dangerous country to visit for the unwary tourist. It is not safe to walk around at night and security issues dictate that accommodation and travel is quite expensive. Being a private practice, there is no operating for a visiting trainee. However the opportunity to assist and watch an expert in his field comes along rarely, and in a matter of weeks I doubled my career exposure to anti-reflux surgery, especially re-operative surgery. Finally both the England cricket and rugby teams were soundly beaten by South Africa during my trip, and they didn't let me hear the end of it.



As an UGI surgical trainee at the time, I feel the trip was most useful in the latter stages of training, a means to question and refine small technical points and subtle decision making that Heine Van der Walt has honed over 25 years of experience. Whilst it would have been interesting to experience the vastly different public healthcare system, there was no time available in the busy schedule. The difference between the "have's and have not's" in South Africa remains considerable.

I would like to iterate my thanks to the ALSGBI and B. Braun Aesculap for this tremendous opportunity. I hope such fellowships will continue, and broaden the horizons of UK trainees. I am sure in coming years this will continue to benefit the Association as well as the National Health Service hugely.

**Mr Andrew Davies**

Winner of the B. Braun Aesculap Travelling Scholarship 2012

## Mr Alex Boddy

### Gastric Surgery at the Cancer Institute Hospital, Tokyo



*Cancer Institute Hospital*

Thanks to the ALSGBI and the B. Braun Aesculap Travelling Scholarship, I was able to embark on the ultimate pilgrimage for an oesophago-gastric surgeon and visit Japan for just over six weeks in the Autumn of 2012. My main aim was to gain exposure to minimally invasive techniques for treating gastric cancer under the instruction of Dr Naoki Hiki, one of the world's leading experts in the field of laparoscopic gastrectomy. I also hoped to see some endoscopic treatment of early gastric cancers and gain more of an insight into how the Japanese manage advanced gastric cancers.

The Cancer Institute Hospital (CIH) is run by the Japanese Foundation for Cancer Research and is situated in Ariake in the Waterfront area of Tokyo (in the heart of an area currently being developed for the Olympics in 2020). The Upper GI Division of the Department of Gastroenterological Surgery is led by Dr Takeshi Sano, an expert in D2 gastrectomy and the lead author of the Japanese Gastric Cancer Association guidelines on the treatment of gastric cancer. Unsurprisingly therefore, the management of gastric cancer at CIH follows these guidelines very closely. Laparoscopic resections are indicated only in early gastric cancers (T1 cancers with no evidence of lymph node involvement), either as a primary treatment for submucosal cancers or for mucosal cancers treated endoscopically but deemed non-curative on review of the histology. Within these guidelines over 300 laparoscopic gastrectomies are performed annually at CIH: a combination of distal gastrectomy, total gastrectomy and also pylorus preserving distal gastrectomy (for tumours in the middle portion of the stomach at least 4cm proximal to the pylorus) and proximal gastrectomy (with jejunal interposition). In addition to the laparoscopic gastrectomies, over 300 open gastrectomies and over 350 endoscopic gastric resections are performed per annum, making CIH the largest centre in Japan for gastric cancer surgery. Patients from all over Japan combine with a small number of international patients to have their surgery performed by these expert surgeons in this outstanding centre. Whilst I was there CIH hosted a two day gastric cancer masterclass, with surgeons and trainees visiting from all over the country to watch the surgery.

On an average week, 10 to 15 gastrectomies would be scheduled (between 4 consultant gastric surgeons). During my 6 week stay in Tokyo I was involved with 13 laparoscopic gastrectomies of various types, performed by Dr Hiki or his colleague Dr Nunobe. I also saw 4 LECS (Laparoscopic/Endoscopic Combined Surgery) procedures, mainly for GISTs close to the GOJ or pylorus. I was involved with 17 open gastrectomies (performed by Dr Sano) and I also saw several endoscopic submucosal dissections. Oesophagectomies are performed by the oesophageal surgery team consisting of Drs Yamada and Mine, and I managed to see 6 cases, 4 of which involved extremely impressive 3 field lymphadenectomies (with bilateral neck dissections) and 2 of which utilised thoracoscopic chest dissections. My involvement with the cases ranged from observing, through assisting to performing sections of the operations under supervision.



*Operating with Dr Hiki*

Twice a week at 7.30 am there was a surgical conference that involved all of the surgeons in the GI surgery department (colorectal and HPB as well as gastric and oesophageal). All of the pre-operative cases were discussed (some of which were presented in English for my benefit) as were the operative / histological findings from the cases performed in the preceding few days. One thing that impressed me was the excellent record keeping – intraoperative photographs were routinely taken for the open cases and all laparoscopic cases were recorded (there seemed to be a theatre employee whose sole job was to go round from theatre to theatre changing over the DVDs before they ran out of space). After the operation the specimens were fully dissected by the surgical residents and the details of the total number and the number of clinically involved nodes from each station was entered into a database. The specimens were then opened and pinned out and photographed before they were finally sent to the pathologists.

Another noticeable difference in practice that struck me was the infrequent use of staging laparoscopy. However, peritoneal washings were routinely taken at the beginning of each case and sent for immediate analysis. If the washings were positive or peritoneal disease was found, a palliative resection was usually performed (with a less radical lymphadenectomy by Japanese standards) as pyloric stenting was not performed for gastric outlet obstruction. Extensive use was also made of frozen sections: the 4sb lymph node was routinely sent for frozen section to help determine if a splenectomy was necessary.

The standard of the surgery I witnessed was superb. The lymphadenectomies performed by both laparoscopic and open techniques were exquisite, and for the time I was there I did not see a significant surgical complication. Of course, the patients are very different to those in the UK: most patients had a BMI in the high teens and the largest patient I saw had a BMI of 29 (super obese according to Dr Hiki).

Tokyo is a huge and amazing city and when I was not at the hospital I managed to take full advantage of what the metropolis and the surrounding area had to offer. Thanks to Dr Yamaguchi, the senior surgeon in the division, I was given front row tickets to one of the three annual Grand Sumo tournaments held in Tokyo – a truly unbelievable experience. Other highlights included the sights, sounds and tastes of the Tsukiji fish market, the autumn colours around Nikko, and a bank holiday weekend enjoying the numerous temples in and around the ancient city of Kyoto (given a little extra excitement by a passing typhoon!).

I wish to thank Dr Hiki, Dr Sano and all of the other consultants and residents at CIH who made my travelling fellowship such an educational and enjoyable experience, and also my mentors at Bristol Royal Infirmary (who have all spent time in Tokyo) who encouraged me and helped me to organise the visit.

**Mr Alex Boddy**

Winner of the B. Braun Aesculap Travelling Scholarship 2012



# Mr Adam Farquharson

## Concord to Bon Accord: Friendship and Fellowship in Sydney

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Like many colorectal trainees in recent times, I found that towards the end of my Higher Surgical Training rotation I wanted to develop specific surgical skills in not only standard but also advanced laparoscopic colorectal surgery. The advantages of working in Australia are well understood and so, when the opportunity arose to undertake a one year Fellowship in colorectal surgery at the internationally renowned Concord Repatriation General Hospital in Sydney's Inner West, I took it with both hands.

Of course, there was the expected exposure to a high volume of cases given that the unit is served by only two Fellows (the Overseas and CSSANZ senior trainees), but what was most impressive was the commitment of the Consultant Surgeons to training. It was always expected that, unless specifically indicated, the Fellow would be the primary surgeon in all cases. This included laparoscopic segmental resections, cancer work with pelvic exenterations, complex fistula disease and pelvic floor interventions. I developed skills in novel techniques such as SILS right hemicolectomy and TEMS with an evolution in my thinking towards laparoscopic approaches to a wide range of surgical challenges. The clinical experience of UK trainees is highly valued in Australia, particularly regarding the management of the critically ill surgical patient and with advanced decision making in complex surgical situations. Well- established surgical principles held by the unit became ingrained in my thinking and I now appreciate that many people benefit from "a straight left colon" and that one must

never "mess with the pancreas" (to paraphrase).

Despite the implications of a 1:2 on call rota, it was refreshing to see that the effort spent caring for the patients in the unit was rewarded with encouragement by the Consultant body to spend time experiencing the wonderful outdoor and urban lifestyles that could easily be enjoyed in Sydney and beyond. Visits to the Great Barrier Reef, New Zealand, the Hunter Valley, the New South Wales coast (with whale watching) and the Three Sisters in the Blue Mountains with Rachel and the children gave us all memories that will not be forgotten. Sport in Australia dominates all subjects and it was incredibly satisfying to watch The British and Irish Lions run to a glorious victory in the Third Test in Sydney. The conversation in theatre on Monday was a little cool.

In short, the opportunities provided by a per-CCT Fellowship in Australia continue to give experience at or even beyond some of those available in the UK. The chance to develop from a personal, clinical and professional perspective, combined with the objective view of the NHS healthcare system from a distance gives this type of Fellowship a real attraction that forms the foundation of an innovative Consultant practice. I am very grateful to the ALSGBI for the generosity of their support with the award to me of the David Dunn Travelling Scholarship funded by Ethicon Endo-Surgery in 2012.

### Mr Adam Farquharson

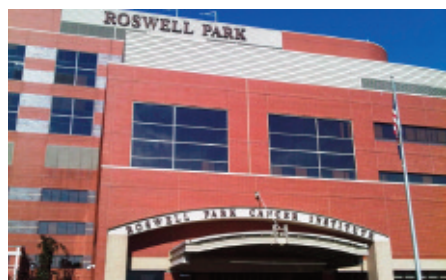
Winner of The David Dunn Travelling Scholarship 2012



# Mr Chidi Molokwu

Roswell Park Cancer Institute (RPCI), Buffalo, New York, USA

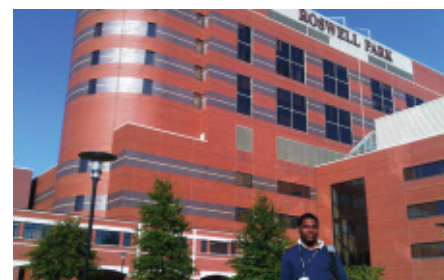
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SHARING EXPERTISE



*Front entrance of the Institute.*



*Dr Roswell Park, founder of the Roswell Park Cancer Institute in 1898*



*Walking through the gardens at RPCI on a sunny autumn day.*

I am a urology specialty trainee at ST6 level. I was awarded a Travelling Scholarship to attend a 2-week robotic surgery training course at Roswell Park Cancer Institute (RPCI), Buffalo, New York, USA in September 2013. In the UK, the number of patients requiring radical prostatectomy is increasing, from less than 1,000 in the year 2000, to 5,000 in 2010. Robot-assisted prostate surgery is well established in the USA and is rapidly replacing open and laparoscopic radical prostatectomy for the surgical management of prostate cancer. Training in robotic surgery is essential for urology trainees with an interest in urologic pelvic oncology. Centres of excellence with validated training programmes and facilities like the RPCI are an ideal place to acquire this training and exposure.

RPCI was founded in 1898 and was one of the first cancer centres in the USA to be designated by the National Cancer Institute as a Comprehensive Cancer Centre. Robotic surgery was introduced to the Buffalo-Niagara region in 2004. By 2008, the percentage of robotic surgery operations for kidney, bladder and prostate cancer had increased from 50 to a staggering 95 percent.

The robotic surgery training programme is run by Professor Kurshid Guru, who has developed a validated training curriculum for beginners in robotic surgery. The programme is intended to teach all of the fundamental skills of robotic surgery using simulators and porcine models before operating on patients, in order to shorten the learning curve and prevent potential harm to patients.

I arrived at the Buffalo-Niagara airport and proceeded to RPCI. Accommodation had been arranged at a nearby guest house. The following day, I met the training team. All relevant documentation was completed and I was given an introduction to

the training scheme. I was scheduled to have sessions on the ROSS robotic training simulator, observation of live surgery in theatre, dry lab sessions with the da Vinci system, and finally perform live surgery using a porcine model.

My training began with a study session using a study tool called 'The Operative Manual of Robot-Assisted Urologic Surgery'. It is a DVD video textbook developed at RPCI which has teaching



*Receiving the certificate of completion of the Fundamental Skills of Robotic Surgery (FSRS) course from Prof Kurshid Guru (centre) and a robotics tutor (right).*

videos of prostate, bladder, renal, adrenal and ureteric procedures. Detailed surgical anatomy is described along with surgical techniques. I then proceeded to the ROSS simulator, which is designed to tutor beginners through all of the fundamental skills required for robotic surgery. It replicates the finger controls and visual field of the da Vinci system. The simulation modules are graduated with increasing levels of difficulty as the trainee

progresses. Training on the ROSS simulator culminates in completing HOST (Hands-On Surgical Training) sessions in radical prostatectomy and cystectomy, during which the simulator takes the trainee through a complete surgical procedure, mentoring and demonstrating the relevant anatomy. I also used the da Vinci robot to perform specified tasks in a dry lab setting.

I was able to attend four theatre sessions to observe live surgery. I observed 2 radical prostatectomies, 1 partial nephrectomy and 1 adrenalectomy. There were several large, flat-screen monitors in the operating room, some with 3D capability, which were used to display the surgical field to trainees. The attending surgeons were keen to teach local as well as visiting trainees. I was also able to learn from the theatre nurses and the anaesthetic team about several aspects of peri-operative care of robotic surgery patients. The final module of training was performing a number of robotic procedures on a porcine model. This allowed me to work with live tissue and further consolidate the skills acquired on the simulator.

I am extremely grateful for the opportunity provided by the B. Braun Travelling Scholarship which made this training visit possible. The knowledge and skills acquired will shorten my learning curve for robotic surgical procedures and help me to improve the care of patients undergoing robotic surgery. I also extend my thanks to Prof Guru and his team who were very hospitable and delivered an excellent curriculum in the 2 weeks I was there.

## Mr Chidi Molokwu

Winner of the B. Braun Aesculap Travelling Scholarship 2013



*Observing live robotic prostatectomy on 3D monitors with other trainees in the operating theatre.*



*On the da Vinci console in the operating theatre.*



*The da Vinci training console in the skills centre prior to a wet lab session.*



# Mr N V Jayanthi

## East & Far East

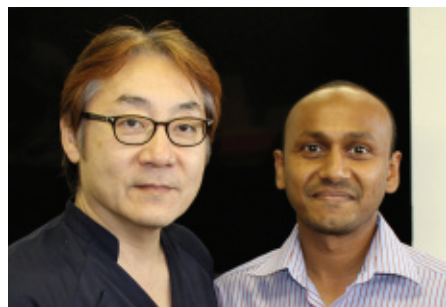


Having started as a Consultant Surgeon at Broomfield Hospital in February 2012 I have been keen to develop advanced minimal access techniques for oesophago-gastric resections. As such I was fortunate to visit the units of Professor

Ichiro Uyama at Fujitha Health University, Japan and Professor Palanivelu at GEM Hospital, Coimbatore, India as part of the David Dunn Travelling Fellowship.

### Japan

First stop in Japan was at National Cancer Centre (NCC), Tokyo. This institute is a solemn institution at the centre of numerous clinical trials for gastric cancer. Vast majority of the surgery is open. During this week, I attended three gastrectomies, one open & shut case (peritoneal metastasis) and



one oesophagectomy. I was introduced to Professors Katai, Fukagawa & Morita and able to attend their Friday morning MDT (conducted in English). I intended to make most of my Japan rail card and travel on the famed Shinkansens (high speed trains) aided by very useful advice from Professor Morita for my travels to North Japan.

I travelled to Fujita University in the second week, spending 2 weeks with Professor Uyama's unit. His contemporaries at the NCC regard Professor Uyama as the 'Emperor' of laparoscopic gastrectomies.

The atmosphere and hierarchical nature at Fujita was a total polar opposite to that I saw at the NCC. There appeared to be a lot of banter between colleagues and also between different levels of hierarchy. Despite all this, it was obvious that Professor Uyama was highly revered by the whole department. The department seemed to be a buzz with activity, excitement and pride. In the next two weeks, I observed 5 total & 3 sub-total gastrectomies (all laparoscopic) and one robotic total gastrectomy. Professor Uyama has developed a great laparoscopic technique for both D2 dissection as well as a linear stapled oesophago-jejunal anastomosis. The technique is very standardised; a junior registrar would be performing a total gastrectomy. The Professor was

approachable, open to questions and very willing to teach and discuss. He took time to go through the differences in the port placements between laparoscopic and robotic gastrectomies. He even hosted dinner after a marathon 7hr robotic gastrectomy and before leaving in the early hours of the following morning to travel to the USA.



I found the attitude and approach of the Japanese surgeons unique & interesting. They are skilful, patient, systematic and meticulous. There is never a race against time and yet they have an uncanny ability to combine humility with confidence. They are very dogmatic, yet at the same time pragmatic. Despite their regimented approach, there always seems to be room for innovation. The two Japanese words that describe their attributes are 'kata' and 'gambatte'. The former means 'method' and the latter means 'fight on'.

### India

My next leg of the fellowship took me to Coimbatore in Southern India where I visited Professor Palanivelu at GEM Hospital. He is one of the most renowned laparoscopic surgeons in India. He attracts politicians and celebrities to his hospital. During my visit, one of the state's cabinet ministers had a laparoscopic cholecystectomy.



GEM hospital is set up to do minimal access operations for every conceivable GI pathology. For the length of my visit of 2 weeks, there wasn't a single open operation.

Details of each operation are religiously recorded into a database. Every operation is recorded and edited pretty much straight after by the fully staffed on site audio-visual department. Not surprisingly, Professor Palanivelu has published

widely. He started to perform totally Minimal Access Oesophagectomy in 1997, almost 2 decades ago and published a series 130 cases in 2006. A thorascopic approach is now the established standard technique in their unit. They haven't had to open a chest for a number of years. So much so that the hospital doesn't even keep a rib retractor!

The technique of resection has changed over the years. A 3-stage Mc Keown type resection was common in the past. With increasing incidence of lower oesophageal & OG junction tumours, 2-stage Ivor-Lewis resection with intra-thoracic anastomosis is now the commonest operation. Thorascopic part of the operation was initially performed in the prone position. Now it is done in a left lateral semi-prone position. Professor Palanivelu performs a linear stapled or hand sewn oesophago-gastric anastomosis. He prefers the latter and does it with PDS suture. The posterior layer is interrupted and the anterior layer is closed with a continuous suture.



I had the opportunity to have a number of discussions with Professor Palanivelu. While GEM hospital attracts a number of rich and famous patients, the vast majority of the patients still come from the neighbouring villages. Professor Palanivelu developed the minimal access technique, after failing to convince the farmers and manual labourers to have laparotomy & thoracotomy for oesophagectomies. Lack of social support system means that these patients need to return to their jobs at the earliest, with minimal loss of function. Hailing from India, I totally understand this issue.

'Necessity, mother of innovation' has been the principle of so many things that come out of India.

I have had the most amazing experience visiting the busiest hospitals in Japan & India headed by world-renowned surgeons. I am ever so grateful to ALSGBI for awarding this coveted fellowship to me and Ethicon for sponsoring this fellowship.

Legend for the photos: All the photos are self explanatory apart from the Photo no. 5: Brihadeeswarar Temple, 66m tall, completed in 1010 AD.

### Mr N V Jayanthi

Winner of the David Dunn Travelling Scholarship 2013

# Mr Baljit Singh



Firstly, I would like to extend my thanks to B. Braun Aesculap and ALSGBI for enabling this Travelling Scholarship to take place. The Scholarship allowed me time to spend at the Department of Colorectal Surgery, Florida Hospital, Orlando with Colorectal Surgeon, Dr Sam Atallah. The purpose of the visit was to learn the technique of trans-anal TME (TaTME) from a centre with a large experience in this procedure and also how to transfer this expertise to my own NHS hospital.

The colorectal department in Orlando Hospital comprised five colorectal surgeons, general surgery residents, two colorectal fellows and a research fellow. The main hospital is based in the centre of Orlando with several smaller hospitals scattered in the peripheral areas of Orlando. Whilst major colorectal resections were undertaken at the Florida Hospital, clinics, endoscopy and day cases were undertaken in the smaller hospitals.



Much of the Florida Hospital has been recently built with state of the art technology from plush interiors to well-equipped theatre suites. This is all helped by the fact that the hospital was initially founded in 1908 by a small group of Seventh Day Adventists in Orlando to bring health care to the community. This religious theme runs through the hospital with impressive artwork and decor. To add a touch of the modern world and the fact that the hospital is in Orlando there was plenty of on-going building work for separate women's and children's hospitals both funded in part by a donation from the Disney organisation. Some of the views from the main hospital were very impressive looking onto a picturesque lake.

The colorectal team were very welcoming and extremely friendly. Dr Atallah has published widely on TaTME and his colleague Dr Matt Albert has a huge experience with TAMIS surgery. With Dr Atallah I attended his outpatient clinics which saw a wide range of colorectal problems from haemorrhoids, fistula and anal fissures. It was interesting to see a different perspective in the management of these conditions. In line with many US

hospitals medical records were all electronic.

As I was focussed on gaining experience regarding the TaTME procedure Dr Atallah had an extensive library of unedited videos which we spent several hours going through. They illustrated detailed steps for TaTME from case selection, to patient setup and the surgical procedure. I also saw videos regarding future developments for TaTME from the robotic platform (DaVinci Sp Single port), a cadaveric procedure demonstrating the transvaginal route for undertaking a hysterectomy and image guided real time navigation for TaTME.

Dr Atallah was very open during the visit and I had plenty of opportunity to discuss TaTME. I was also introduced to the main theatre sister to appreciate how best to organise the theatre staff and equipment when undertaking TaTME.

I saw several surgical cases during my stay. These included several laparoscopic resections and the TAMIS platform to repair a recto-urethral fistula. I also saw a wide range of new technologies including the Lifecell Spy Imaging platform to check perfusion of the proximal colon prior to anastomosis and the Surgique Airseal CO2 insufflator. The latter was key to maintaining a near perfect seal for the TaTME.

Dr Atallah had also arranged for a live TaTME case. This took place in the Innovation Suite, which as its name suggests, was an impressive operating theatre. It was also designed to bring in three intraoperative MRI scanners if required.

The live TaTME case I saw was a 50 year old female with a low rectal cancer post chemoradiotherapy. The patient set up and equipment was similar to that found in most laparoscopic theatres. The abdominal phase of the procedure was undertaken by the first team including complete splenic flexure mobilisation. The abdominal team performed a limited rectal dissection only entering the TME plane posteriorly. Thereafter Dr Alberts and a second team began the transanal phase. This involved using the Applied TAMIS port. The steps were very clear and views were excellent. During the procedure it was possible to ask questions. As the abdominal dissection proceeded to the mid rectum the transanal operator was guided by the abdominal operator from above to ensure an accurate plane of dissection. In an experienced unit like this the whole procedure took three and half hours.

A TAMIS course was also run during my visit which again involved live operating and a didactic lecture session.

This was an excellent opportunity to spend time with a well established colorectal surgeon with extensive experience with TaTME. I am very grateful to B. Braun and ALSGBI. This has allowed me to introduce the technique of TaTME into my own hospital.

## Mr Baljit Singh

Consultant Colorectal Surgeon and Honorary Senior Lecturer University Hospitals Leicester

Winner of the B. Braun Aesculap Travelling Scholarship 2014



## Mr Khaleel R Fareed



I was awarded the B Braun Aesculap travelling fellowship in November 2015 enabling me to visit the world-renowned Karolinska Institute in Stockholm, Sweden. Subsequently I attended the Congress of the European Society for Diseases of the Esophagus held in Stockholm.

Healthcare in Sweden is largely tax-funded; a system that ensures everyone has equal access to healthcare services. The responsibility for health and medical care in Sweden is shared by the central government, county councils and municipalities.

I was especially impressed by the systematic organisation of the hospital. The Karolinska University hospital is set in a beautiful location a few miles away from the city and has very strong research collaborations with the Karolinska Institute. The Karolinska University Hospital has 1,600 beds and



admits over 100,000 patients each year.

The Karolinska University Hospital is the largest university hospital in Sweden and a national referral centre for specialised care. The Upper GI Surgery unit is led by Associate Professor Magnus Nilsson and comprises three other consultant surgeons, two Specialist Registrars, a Senior Japanese Surgical Fellow and a team of more junior trainees.

Having developed an interest in laparoscopic Upper GI surgery and minimally invasive cancer surgery during my training, exposure within a high volume specialised centre observing a new method of performing minimally invasive oesophagectomy (MIO) was invaluable.

My decision to visit Karolinska followed a presentation delivered by Dr Ioannis Rouvelas (Senior Consultant Upper GI Surgeon) at a local meeting in Chelmsford. Dr Rouvelas described his unit's experience of performing MIO using a linear stapled anastomosis in the thorax in the prone position. I was keen to observe this technique and grateful to be invited by Dr Rouvelas and his team to visit the unit for a week.

I observed the 2-phase MIO whereby the laparoscopic procedure was performed with the patient in the supine French position. The conduit was created in the abdomen but not completely divided from the specimen. A 2-cm long proximal 'bridge' remained undivided, acting as an anchor to the



*Professor Lars Lundell, Mr Khaleel Fareed and Dr Ioannis Rouvelas*

specimen, in order to facilitate the pull-up of the specimen into the chest during the thoracoscopic phase. The thoracoscopic procedure is performed in the prone position. The side-to-side anastomosis was fashioned using a linear stapler. All patients followed an enhanced recovery program. The patients spent the first three days in HDU and were then transferred to the ward. Patients were allowed sloppy diet on post op day 6 and solid food on day 8.

The Upper GI cancer unit in Karolinska performs up to a hundred oesophago-gastric cancer resections (approximately 50-60 MIOs) a year. Operating sessions occur on Mondays, Tuesdays and Thursdays. Wednesday comprises an outpatients' clinic and an interventional endoscopy list. Friday is dedicated to MDT and for ensuring loose ends are tied prior to the weekend. The Upper GI unit assesses and treats oesophago-gastric and hepato-pancreatobiliary cancers and complex benign upper GI diseases. It does not perform primary Bariatric surgery but on occasions deals with complex post-operative problems. One of the most enlightening observations was the professionalism within the team, meticulous attention to detail and a thorough, systematic approach when operating. I hope to use such lessons and examples to benefit my own practice in future.

I was able to attend the Congress of the European Society for Diseases of the Esophagus. This had a unique scientific program with international experts in the field of both Upper GI cancer and complex benign disease. Dr Rouvelas and his team demonstrated live surgery of MIO which enabled me to gain from their teaching adding to my prior experience and knowledge.

Following my visit, short term outcomes of this technique have been published for 46 consecutive patients with distal oesophageal or gastro-oesophageal junction cancer.<sup>(1)</sup> This is the first report of an intrathoracic linear stapled anastomosis in the prone position in a Western population.

There is also a close twinning fellowship program between the National Cancer Institute in Tokyo, Japan and a senior trainee surgeon spends up to two years in Karolinska. I appreciated the warm welcome I received when attending this unit and can understand why it is attractive for foreign surgeons to visit.

### Mr Khaleel R Fareed

Winner of the B Braun Aesculap Travelling Scholarship 2015

### REFERENCE

1. Irino T, Tsai JA, Ericson J, Nilsson M, Lundell L, Rouvelas I. 'Thoracoscopic side-to-side esophagogastronomy by use of linear stapler- a simplified technique facilitating a minimally invasive Ivor-Lewis operation. *Langenbecks Arch Surg* (2016) 401: 315-322.



# Mr Steve Hornby



Figure 1: Members of the Austin Health UGI and Bariatric Surgery Team (Surg III).

In 2015, kindly sponsored by ALSGBI and the B. Braun Aesculap Travelling Scholarship, I completed a one year fellowship in Laparoscopic UGI and Bariatric Surgery at Austin Health in North East Melbourne. Established in 1882, Austin Health has 980 beds over four sites in the suburb of Heidelberg. The organisation has an operating budget of \$700 million and is affiliated to eight separate universities-it is the largest surgical training centre in Victoria.

The UGI Department (SURG 3) offer a full range of benign, malignant and bariatric UGI services and acts as a tertiary referral centre. The Austin offers care to a widely diverse population and frequently encounters unusual and complex problems and I had the pleasure of managing a fair number of 'Austinomas' in my time there.

I was supervised by Ahmad Aly, the Head of Upper GI Surgery at the Austin and the current President Elect of the Obesity Surgical Society of Australia and New Zealand (OSSANZ). Ahmad himself has completed advanced UGI fellowships in both Adelaide and Sheffield, UK. The Upper



Figure 2: ANUM (Associate Nurse Unit Manager) Amanda Kerton and I waiting for our oesophageal stent.

GI team consists of six consultants, 2 fellows, 2 registrars, 4 interns, 2 dietitians, a nurse liaison, a specialist ward sister and a research nurse.

A typical working week for the Fellow at the Austin would include; two full day and one half day operating lists, two endoscopy list, two clinics, one MDT meeting, one morbidity and mortality meeting, one pathology meeting and two consultant ward rounds. If that seems like a lot, it is because it is!

Operating lists are split over two sites. Oesophagogastric, pancreatic resection and revisional bariatric work is performed at the Austin Main Hospital with Day case and short stay work such as primary bariatrics, hernias and gallbladders are performed at the Repatriation hospital nearby. The bulk of my work was cancer resection and revisional bariatrics and managing the emergency service.

Over the year I trained in some innovative laparo-endoscopic techniques where procedures such as excision of luminal GISTs, endoscopic mucosal resections and reversal of vertical band



gastroplasties were performed using an endoscope with the camera and operative port passing directly into the stomach. So called 'Transgastric' techniques offer a minimally invasive option to tackle issues that would otherwise require a large gastrostomy. Operating within the stomach is particularly effective when lesions lie at the proximal and distal extremes and allows for a high degree of accuracy when working near the gastro-oesophageal junction.

As the Upper GI Fellow I was non-resident first on call for General Surgery at least one night a week and approximately one in four weekends. Pre FRACS registrars are not allowed to operate independently without a Fellow or Consultant in the near vicinity. For problems of a specialist oesophagogastric or bariatric nature I was the first point of call around the clock. This is as part of an incredibly supportive consultant team but it makes for a busy out of hours practice.

Additional responsibilities I took on included a very active role in the cancer MDT, the supervision and training of the junior members of the medical team, chairing and delivering formal teaching seminars, providing education sessions for the nursing staff and short listing and interviewing for other Fellowship positions. Each year the Fellows are expected to produce an audit of the department's activity over the previous year and produce an in depth review of one of the department's key services.

The Austin provided a very reasonable study budget and during the year I was able to complete a mini visiting fellowship in advanced upper GI surgery at the Prince of Wales Hospital, Hong Kong with Professor Phillip Chiu.



*Figure 4: My wife Clare and I enjoying a wine tour in the stunning Yarra Valley.*

The Fellow's salary is augmented by 2 regular operating lists assisting two of the department's consultants at the neighbouring private hospital. I found these lists very helpful as I saw them as an opportunity to attend a regular masterclass in a low stress environment. How much one gets to do surgically at these lists is largely down to the individual consultant but they provided an excellent chance to get to know my supervisors and were enormously informative about practicing surgery outside of the public



*Figure 3: A view of a retroflexed endoscope viewing the site of a GIST excised from close to the gastro-oesophageal junction*

hospital setting.

According to the Economist Intelligence Unit global "liveability" study, Melbourne is the number one city to live in on the planet. In the study Melbourne scores a 97.5 out of a possible 100 and my wife and I can certainly attest to this being entirely fair.

Melbourne is a vibrant, warm and exciting city that made us feel welcome from the moment we landed. The culinary and live sports are second to none. Whilst the city is sprawling there is a very tangible sense of community wherever you go and we felt safe everywhere we went. We lived in the bohemian suburb of Fitzroy, which is 12 minutes tram ride from the central business district and 12 minutes drive from the Austin Hospital. Tripadvisor lists there being 207 restaurants in Fitzroy alone and the newly gentrified area is steeped in the rich history of the city. It is a crazy little village within a city and we filled our free time with arts and music and some of the most amazing food we have ever tasted. And the coffee, don't start me on the coffee.

The countryside surrounding the city that we visited including the Yarra Valley and Wilson's Promontory are some of the most spectacular and rich in wildlife that you could hope for.

Melbourne is a long way from home and whilst getting there and setting up a life is one of the biggest challenges we have faced as a family, it turned out to be one of the most joyful and rewarding years of our lives.

There are lessons that I learned and pitfalls that I faced and I would advise anyone entering into an Australian Fellowship to go and sit down with someone who has done one recently. A particularly excellent resource is the Association of Surgeons in Training Guide to Australian Fellowships authored by Will Hawkins, a document I would have been lost without.

The role of the 'Australian Fellow' is much closer to that of a junior consultant than a senior registrar. At the Austin you are very much treated as a colleague by the consultants and there is an initially imperceptible but retrospectively obvious, withdrawal of active supervision as the year goes on. I got the impression that my colleagues at the Austin took great pride in providing a very specialised 'finishing school', which I certainly found totally invaluable in bridging the gap from Registrar to Consultant.

**Mr Steve Hornby**

Winner of the B. Braun Aesculap Travelling Scholarship 2015



# Mr Akinfemi Akingboye

My experience at the Colorectal Surgery Division of The Mayo Medical Centre  
Rochester, Minnesota

**B. BRAUN**  
SHARING EXPERTISE



*Mayo Clinic at Night and photograph at the Mayo Clinic*

I am a Specialty Surgical trainee at Cambridge Deanery, presently working in Luton & Dunstable University Hospital. I was awarded the B. Braun Aesculap Travelling Scholarship, which afforded me the rare privilege of visiting the world renowned Colorectal surgery division of the Mayo Clinic, Rochester, Minnesota, with the aim of learning advanced techniques in minimally invasive surgery with particular interest in learning recent advances in Robotic assisted surgery and its applications in Colorectal Surgery. My first day at the Mayo Clinic commenced with a very well organised full induction, which is the same routine induction rigor used for fellows and resident trainees. There were 2 other visiting fellows from outside the United States of America; one in clinical psychiatry and the other was in HBP surgery.

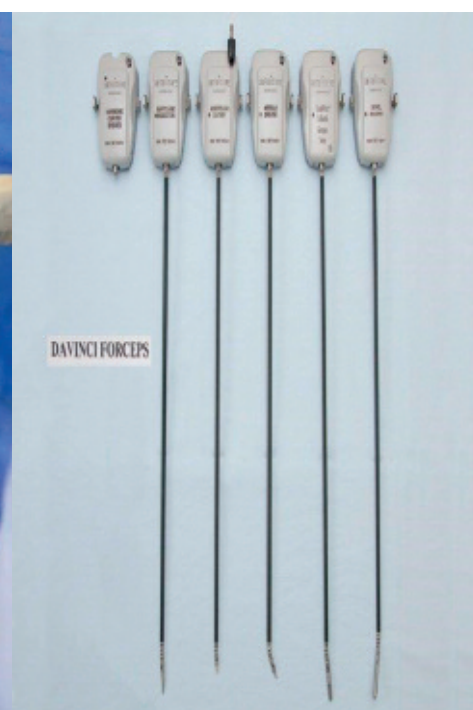
The colorectal division had 9 consultant staff; 5 were robotically trained and the others were laparoscopic colorectal surgeons. Each of the consultants had an assigned intern and resident trainee and in addition there were four colorectal fellows in the unit. Four fully functional operating rooms were dedicated for colorectal surgery daily. In addition, there was a separate purposely built colorectal operating room with full facilities for intraoperative radiotherapy. There were two robotic assisted operating rooms shared amongst the urologists, gynaecologists and the colorectal surgeons. On average, there were about 50 colorectal cases per week. The Colorectal Surgery division is a world renowned centre for treating complex Colorectal disease and the unit has an outstanding track record in the treatment of recurrent rectal cancer, with special emphasis on the use of intraoperative radiotherapy and it is one of the main proponents for the use of intra-operative radiotherapy.

The unit deals with very complex colorectal cases. I was involved with 3 cases of complete pelvic exenteration with formation of ileoconduit/ colon-conduit. This means that these complex cases were done as open surgery, but I soon discovered that there is a niche for Robotic surgery application for complex cases. Besides the complex colorectal work, the unit has a close affiliation with the gastroenterology department, which further generates referral of IBD cases. The management of very complex perianal fistula follows the same principles as

treating sepsis (using seton-faecal diversion if appropriate, and advancement flaps when indicated). The unit also has facilities for endoanal resection of early stages anorectal tumour (TAMIS), which is heavily supported with the provision of frozen sections by the pathologist. It is worth mentioning that frozen section is a cradle project of the Mayo Clinic.

Robotic surgery has been around in Mayo Clinic over the last 15 years. The robotic system has been recently upgraded to the da Vinci xi (4th generation robotic system) which allows the interactive arm to be adaptive to different positioning on the patient with a high definition 3D camera and has been routinely used for dissection in rectal cancer and proctectomy in ulcerative colitis patients. The main operative advantage of the da Vinci xi robotic assisted system in rectal/pelvic work is the high definition visual 3D images which allows for preservation of pelvic nerves, precise tissue handling and dissection, giving an added advantage in ultralow rectal cancer and has been shown to improve circumferential and distal margin sections. It has historically been very challenging to adapt the system for total colectomy but I was privileged to observe the first case of panproctocolectomy done with the robotic system during my stay.

Robotic surgery has been integrated into the training of the residents and the fellows at the Mayo Colorectal division, and the unit has a dry laboratory for robotic simulation. I took advantage of this program during my visit. The training was organised by the representative from the Intuitive Surgical company the manufacturer



*Standard laparoscopic set-up and the da vinci forceps*



of the da Vinci system and the certified surgical assistant nurse who assisted in the first ever robotic surgery that was carried out in Mayo Medical Centre. The session included the principles of operating the da Vinci system, the principle of targeting, safe insertion of the ports, controlling the arm and changing the instruments and providing effective assisting during surgery.

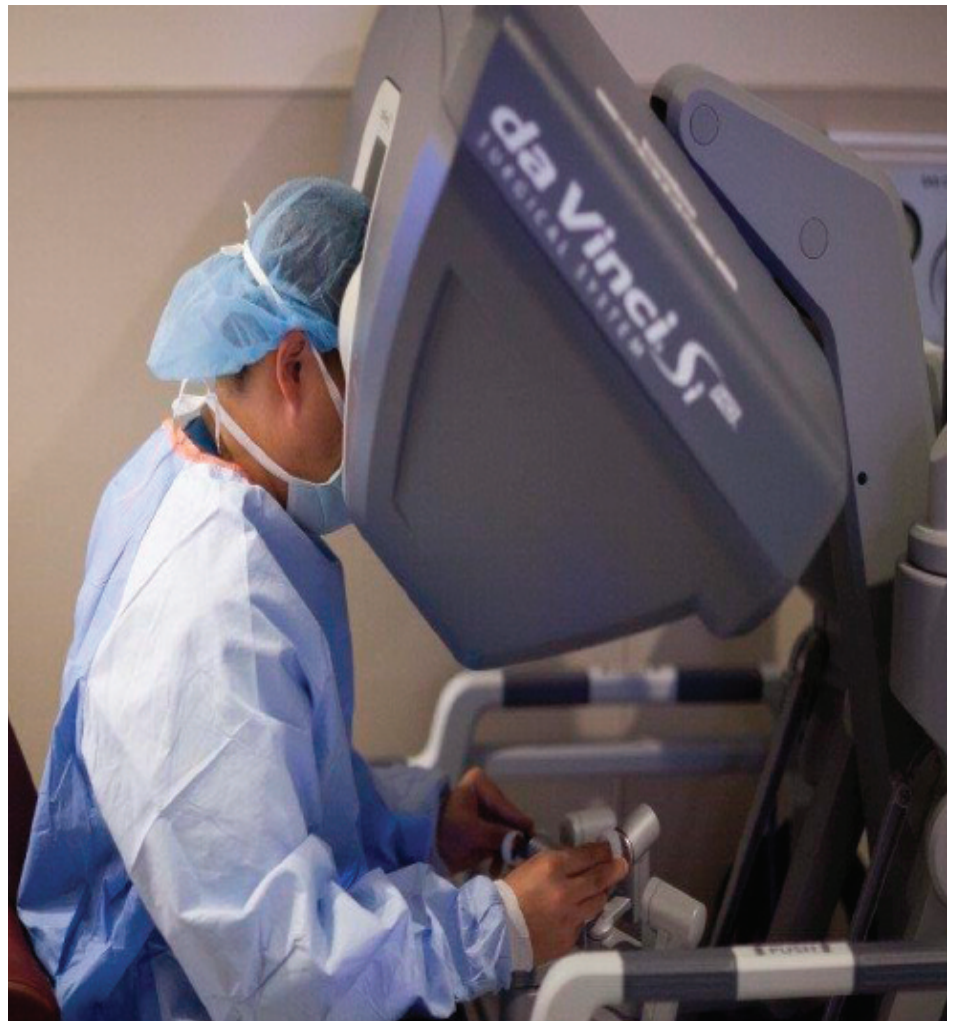
The next stage of the training was learning to operate from the surgeon's console with the endo-wrist instrument. The simulator has inbuilt modules such as targeting, visual co-ordination and surgical exercises such as ergonomic manoeuvres, suturing, knotting and cauterizing to control bleeding. Each module graduates in complexity as the trainee progresses with each task.

Furthermore each trainee has an individualised identification number which allows for storage of the trainee's performance on the system. Each module is broken into stages to reflect areas of progress and challenges. This provides the trainee with a performance monitoring system which helps to reduce the learning curve. I had free access to the dry lab, aside the training course, and most of my spare time was spent completing all the modules on the simulator.

The collaboration between clinicians and the other medical expertise in Mayo Clinic is all funnelled into providing a stress less experience at the gigantic ultra-modern facility which otherwise, many external observers may find daunting and intimidating. The integration of care was evident by the way cross referrals between specialists worked and how patients' clinic appointments were synced. For example, some of the patients in colorectal clinic that required inputs from either urologists, gastroenterologists, oncologists, anaesthesiologists, and or plastic surgeons were seen in other concurrently running clinics. This provided a holistic health care delivery package. Another example that readily comes to mind was the promptness with which the pathologists provided immediate reports from frozen section during colorectal resection to facilitate accuracy of resection margins.

The surgical resident teaching sessions held every Monday morning at 7:00am, two of which I attended, was taught by consultant staff from other departments. The topics were the role of radiation oncology in colorectal cancer and the role of endoscopic transanal resection of rectal tumours respectively. Surgical residents in the final year of their training had opportunities to present interesting cases seen during their posting at a grand round moderated by three to four consultant staff. The trainees critiqued the clinical management of the patients backed with current clinical evidence. This also served as a means to prepare the trainees for their membership examinations.

The Mayo Clinic model of care is predicated



*Surgeon Operating from the da Vinci Si Console*

on the highest standards of clinical practice as established by the rich heritage of the Mayo brothers. The Mayo Clinic logo of three interlocking shields symbolizes Mayo's commitment to excellent and interdependence in the three areas of Research, Medical Education and Clinical Practice.

In conclusion, despite the high volume of work, the trainees still enjoyed one to one mentoring. There were excellent research opportunities, and each trainee had a project they were actively involved with. The topical issue in the unit was the insurgence of surgical site infection in colorectal surgery. As a result of this, the unit reverted to mechanical bowel cleansing with dulcolax, metronidazole and neomycin. Consequently, there is an on-going randomised controlled trial to investigate this change in clinical practice.

I end with a quote from Dr W J Mayo. "It is a great thing to make scientific discoveries of rare value, but it is even greater to be willing to share these discoveries to encourage other workers in the same field of scientific research".

On this note, I would like to extend my sincere appreciation to the Association of Laparoscopic

Surgeons of Great Britain and Ireland and B. Braun Aesculap for sponsoring my visit to Mayo Clinic. Finally, I would like to thank Professor DW Larson and the colorectal surgery division for the opportunity. I would also like to thank Dr Kellie Mathis, who provided continued mentorship when Professor DW Larson was unavoidably absent due to other non-clinical commitments.

**Mr Akinfemi Akingboye**

Winner of the B. Braun Aesculap Travelling Scholarship 2015

# Mr Vincent Kah Hyme Wong

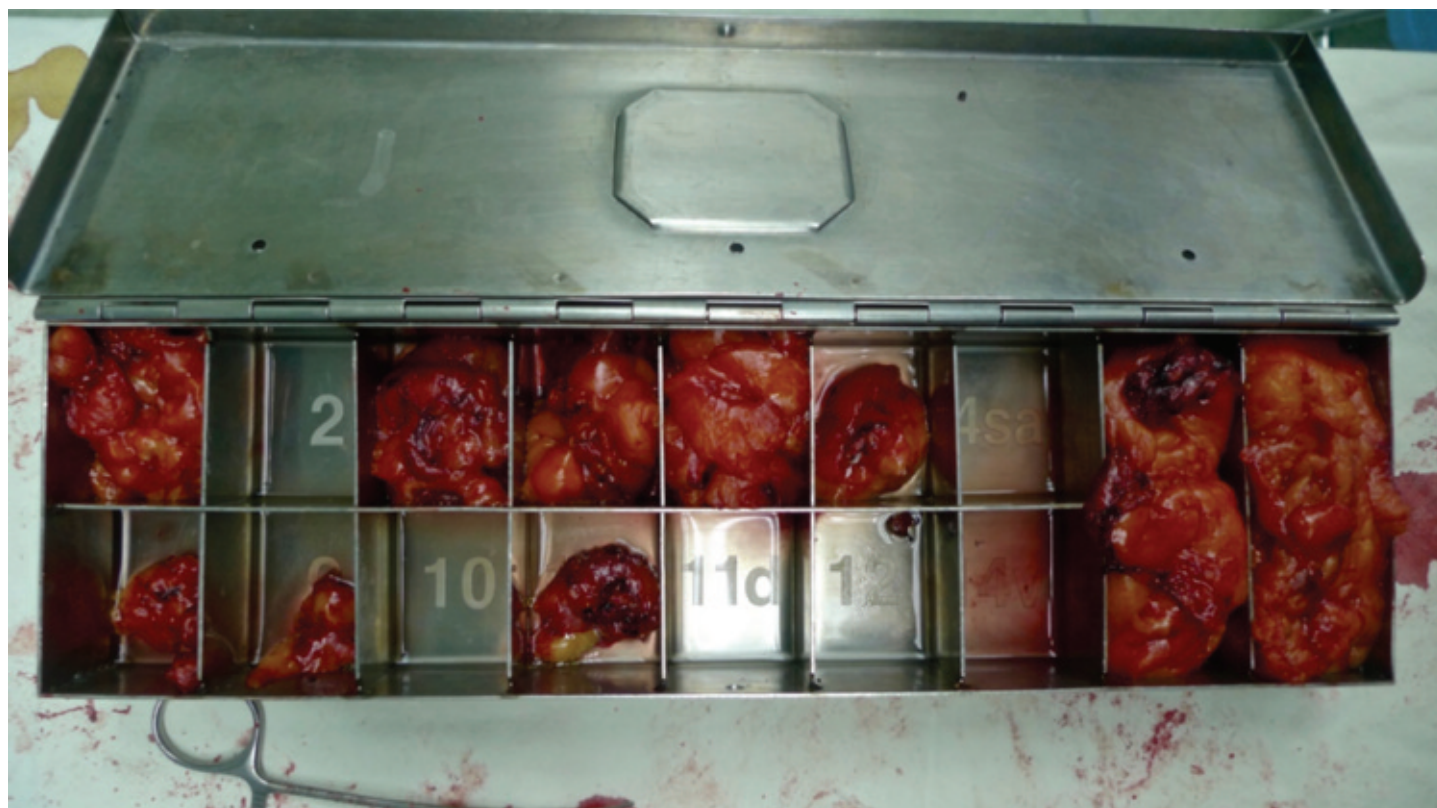


Figure 1: Dissected peri-gastric tissue placed according to the lymph node stations

It was 8 am on a sunny April Monday, I was standing at the lobby of Seoul National University Hospital (SNUH) jetlagged, but excited, I was waiting to meet Dr Yun-Suhk Suh from the Gastric Cancer Centre in SNUH. Led by Professor Han-Kwan Yang, this impressive unit typically performs over 1,000 gastrectomies every year, 60% of which are performed laparoscopically. I had arranged to spend a few days with the unit as part of my travel fellowship.

On introduction, speaking with an American accent, Professor Han-Kwan Yang is warm, welcoming and effusive. Whilst showing me around the theatres he advises me that there were to be two laparoscopic assisted distal gastrectomy (LADG) and an open gastrectomy that day. By the time I have changed into scrubs and found my way to theatre, 1 of the 2 LADG cases was already ongoing.

In contrast with my experience in the UK, the operating surgeon in SNUH was standing on the patient's right while the assisting surgeon was on the patient's left. The camera operator (expertly controlled by the theatre assistant) was standing between the patient's legs. The first part of LADG involved mobilizing the greater curve of the stomach, isolating and dividing the left gastro-epiploic vessels and isolating the right gastro-epiploic vessels. From a trainee perspective, it was interesting to note that the first part was performed independently by the surgical fellows which is equivalent to surgical registrars in the UK. Professor Yang would then continue the operation; dividing the right gastro-epiploic vessels and performing D1+ lymphadenectomy followed by a mini-laparotomy for the distal gastrectomy and a Bilroth 1 anastomosis using a circular stapler. The resected specimen is then handed out to the junior surgeons for dissection of lymph node stations (Fig 1). An LADG will typically take between 1½ – 2 hrs to complete.

Over the course of my brief few days in SNUH, I observed 6 cases of laparoscopic assisted distal gastrectomies (LADG) and an open D2 gastrectomy which was abandoned due to peritoneal metastases. As majority of gastric cancer cases in Korea are diagnosed early, they do not routinely perform omentectomy or D2 lymphadenectomy. Rather, there is a move to tailor the operation to the location and stage of the gastric

cancer to preserve organ function.

In addition, Professor Yang and his team has a robotic surgery list every Wednesday. Using the da Vinci surgical system, they normally have a robotic assisted distal gastrectomy (RADG) on the list. It was indeed an eye opener and an experience for me to treasure (Fig 2). Unlike open or even laparoscopic surgery, robotic surgery felt very much like a 3D video game at times with the ability to change and select which instrument to control. It is an exciting frontier for Upper GI surgery and if given the opportunity, something which I would like to explore. However, the prohibitive cost of da Vinci surgical system and the instruments may be difficult to justify in this current austere NHS climate.

Following my brief time in SNUH, I attended the Korean International Gastric Week Congress. Held in the beautiful Jeju island, the 3-day congress was attended primarily by surgeons from Japan, Korea, China and South-East Asia (Fig 3). The congress was focused on the latest advances and research in gastric cancer; including ongoing multi-centre trials such as sentinel lymph node biopsy for gastric cancer (SENORITA) and the recently concluded REGATTA trial for advanced gastric cancer with single metastases. An illuminating talk from the congress which I will certainly remember was by renowned Dr Hitoshi Katai on his experience on managing gastric cancer.

Moving on from Korea, I then spent the bulk of my fellowship in the Cancer Institute Hospital in Tokyo. Headed by Professor Takeshi Sano, they typically performed 14-16 gastrectomies and 2-4 oesophagectomies each week. On my first day there, I was pleasantly surprised to find out that there was another UK observer starting at the same time. Mr Bijendra Patel, an Upper GI consultant from Barts Cancer Institute, who was spending several weeks there as well. It was an ideal arrangement as during our time there, we would often discuss our management approach for individual cases and different surgical techniques while observing the operations. MDTs are held every Wednesday morning at 7.30 am. Conducted mainly in Japanese, the MDTs are not strictly speaking multi-disciplinary as the meetings are attended primarily by surgeons with the junior surgeons presenting the cases and the radiological findings.



During my two weeks with the Cancer Institute Hospital, I observed 3 oesophagectomies and 8 gastrectomies including laparoscopic assisted proximal gastrectomy, laparoscopic total gastrectomy and open total gastrectomy with D2 lymphadenectomy. For oesophagectomy, they would normally perform a 3 stage thoracoscopically assisted oesophagectomy. It was fascinating to see the surgeons meticulously dissecting out the oesophagus and taking care to identify and preserve the recurrent laryngeal nerves. The anatomical knowledge of Japanese surgeons is impressive as they seem to know the name for every single minute blood vessel.

Whilst the Japanese tend to be formal and hierarchical one particular gastric surgeon rather stood out - Dr Naoki Hiki, he is one of the senior gastric surgeons, who likes to have his music playing in theatre and has friendly banter with his juniors and ourselves whilst operating. He is a keen teacher as well; patiently explaining to us about the 'Double flap technique' to prevent reflux following proximal gastrectomy - an interesting technique which requires careful dissection of the anterior stomach wall and according to Dr Hiki, has a good outcome in preventing reflux.

The highlight of my fellowship with the Cancer Institute Hospital has to be when Professor Sano gave a masterclass in open D2 total gastrectomy. It was a joy to behold his deftness in D2 lymphadenectomy with an ultrasonic scalpel, the confidence in the vascular anatomy around the stomach and the efficiency of his surgical craft.

To culminate it all, Mr Patel and myself were treated by Professor Sano to a lovely meal in a French restaurant near Tokyo station. Situated on the 35th floor, the restaurant has an amazing view of the Tokyo skyline. The food and wine were superb too; so much so that I brought my wife to the restaurant the next day.

My fellowship in Seoul and Tokyo has been an amazing exposure to a different surgical culture, attitude and management of oesophago-gastric malignancies compared with the UK. The disease burden, disease type and patient demographics may be different, but the culture of excellence and the refined surgical craft which I witnessed in Seoul and Tokyo are the areas which I seek to emulate in my surgical career. For that, I am truly indebted to ALSGBI and Johnson & Johnson for providing me the travel fellowship grant.

#### **Mr Vincent Kah Hyme Wong**

Winner of the David Dunn Travelling Fellowship 2015



*Figure 2: (a) Robotic assisted distal gastrectomy. (b) Myself with Professor Yang in the da Vinci Robotic Theatre.*



*Figure 3: Professor Han-Kwang Yang, Professor Jimmy So and myself in the Korean International Gastric Cancer Week Congress*



# Ms Nienke Warnaar

**B. BRAUN**  
SHARING EXPERTISE

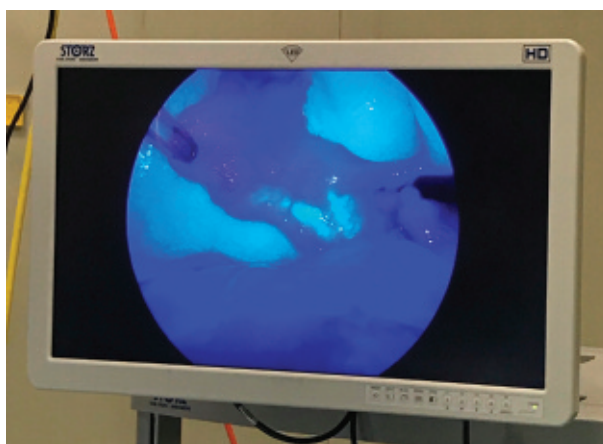


I was awarded the Travelling Fellowship in November 2016 enabling me to visit Professor Luigi Boni in Milan, Italy. Fluorescence or image guided surgery has gained more and more popularity over the recent years and Luigi Boni has been one of the leaders in this field. The week before my planned visit in June 2017 I also attended the EAES meeting in Frankfurt where I participated in the ICG Masterclass. Once in Milan, I hit the ground running..

The "Ca' Granda Ospedale Maggiore Policlinico" Foundation in Milan, traditionally known as the Policlinico of Milan, is one of the oldest hospitals in Italy, founded in 1456. Today it is a modern hospital with 1000 beds located in the heart of the fabulous city of Milan. Ever since 2010 Policlinico has been under major development with impressive renovation works throughout the hospital grounds. The surgical department is nearly finished and includes completely new integrated operating theatres.

The abdominal and emergency surgical department consists of 25 consultants and 6 specialty registrars. With 38 inpatient beds, they perform 1300 surgical procedures a year including 250 colonic resections and around 300 cholecystectomies. ICG is used in every single one of those procedures. I joined Professor Luigi Boni

BACK	Notifications	BACK	Notifications
<b>Course directors:</b> Luigi Boni (Italy), Michele Diana (France), Abe Fingerhut (France)			
<b>12:00 - 13:15</b> Basic principles of fluorescence guided surgery and overview of the current clinical applications Luigi Boni (Italy)		<b>15:00 - 15:15</b> Fluorescent lymphatic mapping in gastric cancer Young-Woo Kim (Korea)	
<b>13:15 - 13:30</b> Fluorescent cholangiography in laparoscopic cholecystectomy Fernando Dip (USA)		<b>15:15 - 15:30</b> Fluorescent angiography during colorectal resection Ronan Cahill (Ireland)	
<b>13:30 - 13:45</b> Fluorescent guided liver resection Takeshi Ishizawa (Japan)		<b>15:30 - 15:45</b> Future development of fluorescence angiography Michele Diana (France)	
<b>13:45 - 14:00</b> Fluorescent angiography in bariatric procedures Thomas Carus (Germany)		<b>15:45 - 16:00</b> Fluorescent guided transanal endoscopic operations Moroo Allax (Italy)	
<b>14:00 - 14:15</b> Fluorescent angiography during esophagectomy Simon Law (Hong Kong)		<b>16:00 - 16:15</b> The EAES fluorescence guided surgery registry Salvador Morales Conde (Spain)	
<b>14:15 - 14:30</b> Fluorescent lymphatic mapping in colonic surgery Nicola De Manzini (Italy)		<b>16:15 - 16:30</b> ICG fluorescence for pouches and IBD Antonino Spinelli (Italy)	
<b>14:30 - 15:00</b> Coffee break		<b>16:30 - 16:45</b> A look into the "near" future of fluorescence guided surgery Alexander Vahrmeyer (The Netherlands)	



in theatres for 2 weeks, together with a colorectal fellow from the Philippines and a consultant colleague from Palermo.

It was interesting to see that Professor Boni was present in all or at least part of every case despite being lead of the abdominal and emergency surgical department and in charge of the renovation of the surgical unit. He not only trains his juniors in laparoscopic surgery but often his consultant colleagues as well. As ICG is used as standard, every member of the team is well informed and involved when it comes to this technique. It's beneficial value was well demonstrated during intraoperative findings in many cases and in particular, a case involving a cholecysto-duodenal fistula.

I would like to thank Luigi and his team for their hospitality, the city of Milan for looking after me and also extend my sincere appreciation to the Association of Laparoscopic Surgeons of Great Britain and Ireland and B. Braun Aesculap for sponsoring my fantastic visit. This has inspired me to use ICG regularly and has provided clarity in some difficult situations already!

**Ms Nienke Warnaar**  
Winner of the B Braun Aesculap Travelling Fellowship 2016





## Mr James Horwood



In 2016 I was fortunate enough to be awarded the B Braun Travelling Scholarship via the Association of Laparoscopic Surgeons (ALSGBI). However, as a result of the arrival of our first child, I had to postpone my travelling plans until 2019!

As a result of a busy professional and personal life, in recent years, I had only been able to attend conferences in the UK – but with the help of the ALSGBI scholarship I decided time had come to visit the US and attend the 2019 American Society of Colon and Rectal Surgeons in Cleveland, Ohio.



In addition, with the assistance one of our recent Registrars currently undertaking a fellowship at the Mayo Clinic (Rochester, Minnesota) I was able to arrange a short visit to one of the leading surgical centres in the world.

After a long journey via Amsterdam and Minneapolis, I finally arrived in Cleveland, Ohio. Cleveland is located in the Mid West, on the shores of Lake Erie. Most notable as the home of the 'Cleveland Indians' baseball team and the location of the "Rock and Roll Hall of Fame".

In true American style, the conference opened with breakfast sessions starting at 0600. During the course of the conference, the sessions were divided by subspecialty interest. Among particularly well attended sessions were Modern Management of Diverticular Disease, which resulted in a call for centres to be involved in an RCT reviewing the use of antibiotics in uncomplicated diverticulitis (to add to the recently published ESCP trials) and

a session on the management of locally recurrent rectal carcinoma. Alternative sessions included 'Managing Stress and Burnout' and 'New Technologies' – where innovators were invited to pitch their inventions to the assembled audience. The social program included an evening at the Rock and Roll Hall of Fame.

Following the conclusion of the meeting, I flew back to Rochester, Minnesota and began a two day visit to the Mayo Clinic. Following a tour of the outstanding facilities (including the art work) I was privileged enough to be invited to attend the colorectal 'tumour board' (MDT equivalent) – and enjoyed listening to the decision making process around complex recurrent tumours with para aortic lymph node disease, perforated rectal tumours and patients with locally advanced synchronous tumours. The use of 'Total neoadjuvant therapy' was a new concept and one to consider at my local MDT. Next came observing a robotic abdominoperineal resection and a robotic low anterior resection with a coloanal anastomosis. I was intrigued to observe the smooth docking of the robot by the surgical team and the use of highly experienced 'surgical nurse practioners' who would assist the fellows. It was very interesting to accompany the operating surgeon to the pathology labs with the specimens to assist the pathologists with immediate 'cut up' of the specimen.

It was a privilege to spend a social evening with the colorectal surgeons from the Mayo and excellent to catch up with our previous Registrar who was clearly having an excellent time on fellowship which will put him in a highly competitive position for consultant posts in the near future. I would like to extend my appreciation to the colorectal team at the Mayo clinic for kindly hosting my visit and also to the Association for awarding me the scholarship and allowing me to visit the US and have such a rich experience.

### Mr James Horwood

Winner of the B Braun Aesculap Travelling Scholarship 2016





# Mr Andrew Healey

**ETHICON** | Shaping the future of surgery  
PART OF THE Johnson & Johnson FAMILY OF COMPANIES



*Ospedale San Raffaele*

I was awarded the ALSGBI David Dunn Travelling Scholarship in November 2016, which allowed me to visit the renowned liver resectional unit under Professor Luca Aldrighetti, in Milan.

Following his kind offer of a placement within his unit we met at the inaugural European Guidelines Meeting on Laparoscopic Liver Surgery. Professor Aldrighetti's expertise and experience in the field of laparoscopic liver surgery is well recognized. Furthermore, as a past President of the Italian Group of Minimally Invasive Liver Surgery (IGoMILS) and Coordinator of the Italian Registry of Laparoscopic Liver Resections, he is significantly involved in surgical training and was an ideal mentor for my fellowship.

In Italy healthcare is provided to all citizens and residents by a mixed public-private system. The public part is the national health service, Servizio Sanitario Nazionale (SSN), which is organized under the Ministry of Health and is administered on a regional basis. San Raffaele Hospital was originally founded as a private hospital by Don Luigi Maria Verze, a spiritual Milanese entrepreneur, who also established a medical school in 1998. It is a remarkably imposing combined hospital and university campus, linked to the main city metro by a monorail, with an on-site hotel, shopping centre and, as I later found out, an aging zoo! Verze sought a place for reflection and well-being for both patients and students and features such as the zoo and sculpted grounds and fountains are typical of the man's vision for the hospital. The trustees running San Raffaele went into liquidation in 2011 and Verze died later that year but his legacy lives on and the trainees would regularly speak of how they enjoyed such an open and accessible campus combined with state-of-the-art facilities.

Having developed an interest in laparoscopic



*Anaesthetic team top*

liver resection and minimally invasive cancer investigation, diagnosis and surgery during my training, exposure within a high-volume specialised centre performing 80% of liver resections laparoscopically was invaluable. My decision to visit was based partly on my own training experience that laparoscopic major hepatectomy was not yet common practice, although it was also driven by the fact that I wanted more intensive exposure and experience of laparoscopic resections to develop my practice as a consultant.

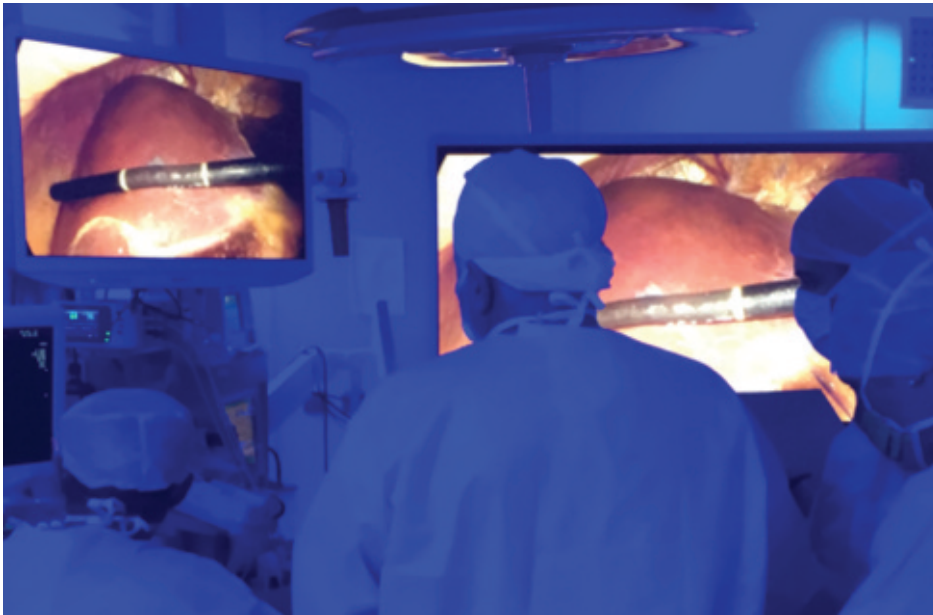
On arrival, my occupational health clearance initially proved a challenge when I was unable to explain in Italian the UK policy of BCG immunisation and my subsequent weakly positive tuberculin test. This was resolved when Professor Aldrighetti liaised with the team specialist infectious disease physician, who administered the correct screening test and I was subsequently allowed into theatre.

Even before attending the operating room, it was clear that the Chirurgia Epatobiliare team was very tight. The hospital supports this in different ways. Firstly, all HPB patients are located on one ward; it is exceptionally rare for a patient to be 'boarded out'. With the exception of Professor Aldrighetti, the 6 team consultants share an open plan office at the end of the HPB ward and there is a waiting room and office for meeting relatives next door. The hospital also supports the team's ethos with initiatives such as asking each specialist team to design a logo for their overalls to wear outside theatre when in 'scrubs'. These have proven popular with patients as they can clearly identify team members on the ward round. This is even more impressive when you see the full repertoire of designs in the canteen at mealtimes.



*Ospedale San Raffaele*





*Theatre set-up*

The surgical team held a daily team brief before distributing clinical commitments according to the difficulty of the operative cases, ward issues and outpatient commitments. The most challenging cases for resection were discussed at a fortnightly MDT (held on alternate weeks with the pancreatic surgical team) and, for example, those requiring detailed hilar imaging and preoperative staging underwent echo-endosonography). Professor Aldrighetti was particularly supportive of my prior echo-endosonography training and I was encouraged to follow operative patients to the HPB EUS unit during pre-operative work up. Again, this was particularly rewarding as many of the patients

with hilar pathology would often have biliary stents in situ and observing the staging by Prof Arcidiacono's team with the artifact of in situ stents was an added educational experience.

When I first observed a major right hepatectomy what struck me the most was the well-established team roles, regimented reproducible set-up in theatre (1 theatre, located immediately above the HPB ward and consultant offices, with 5 days per week operating). Furthermore, the quality of the equipment was impressive. I had never seen such a large 4K monitor; it felt like I was standing in the middle of the transection plane.

The laparoscopic procedure was performed with the patient in the supine 'French position'. The San Raffaele HPB Surgical team perform 25 right hepatectomies per year. I was particularly keen to observe the 3 approaches to hepatocaval confluence during laparoscopic right hepatectomy as described by Professor Aldrighetti in his Surgical Endoscopy paper in 2017. In the picture you can see the laparoscopic CUSA (left-hand) and Thunderbeat (right-hand). This careful selection of the best transection device, combined with excellent visibility and resolution of the monitors, all helped to minimize blood loss and was impressive to observe.

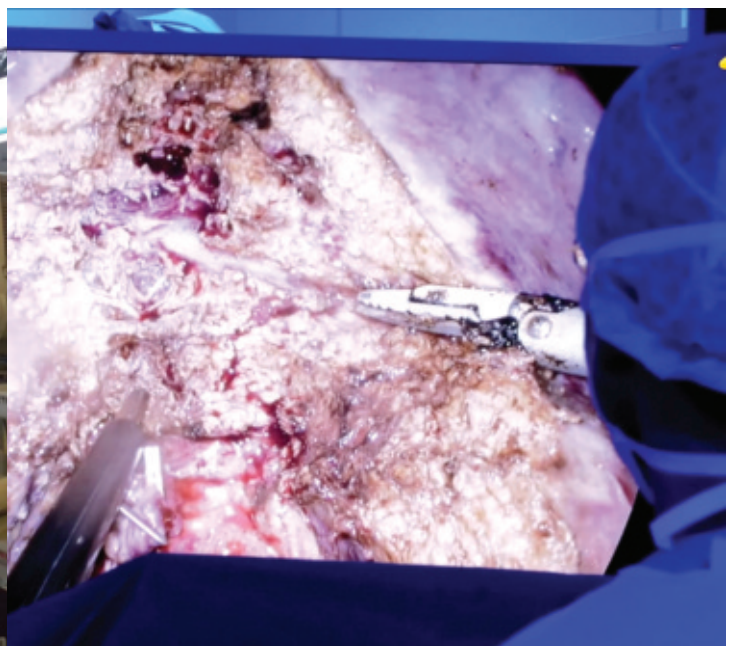
Overall, my time at San Raffaele was an invaluable educational experience and one that would not have been possible without the ALSGBI travelling fellowship funding. I made a great number of new friends during my time at the San Raffaele, such as new contemporaries Dot.ssa Federica Cipriani and Dot.ssa Francesca Ratti, with whom I hope to collaborate in the future. Importantly, I have an expert mentor in Professor Aldrighetti who has kindly offered to host me, should I be visiting Milan in the future. During my time in Milan I was appointed to a UK Consultant HPB post and I am sure the experience acquired during my fellowship played a significant part in achieving this. I hope that my time at the San Raffaele will help to continue to foster relations that will benefit more trainees (both Italian and British) and help to establish my own advanced laparoscopic resectional practice.

#### **Mr Andrew Healey**

Winner of the David Dunn Travelling Scholarship 2016



*Echoendosonography*



*Theatre laparoscopic monitor 4K image quality is outstanding*