Report of Keith R Gardiner
2003 British Traveller, James IV Association of Surgeons

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Destinations and Dates

Week	*Dates*	*Location*	*Host*
1	8-15 June 2003	Toronto	Dr Robin McLeod
2	15-18 June 2003	Cleveland	Dr Vic Fazio
	19-20 June 2003	Pittsburgh	Dr Mitch Fink
3	22-26 June 2003	New Orleans	American Society of Colon & Rectal Surgeons
4	1-5 Dec 2003	Rochester	Dr Heidi Nelson
5	6-12 Dec 2003	Minneapolis	Dr David Rothenberger
6	13-18 Dec 2003	Omaha	Dr Jon Thompson

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Abstract

Introduction. Selection as the 2003 British Isles Travelling Fellow by the James IV Association of Surgeons brought with it high honour and concern. It is a great pleasure to be selected for such an award but rather daunting to consider following in the footsteps of the very distinguished list of James IV Travellers and to contemplate the challenge of organising a multi-step trip(s), preparing numerous talks, controlling workload prior to and after the travels, leaving family for 6 weeks, never mind writing a report that could possibly summarise a 6-week travelling fellowship.

Aims. To visit centres of excellence in colorectal surgery, inflammatory bowel disease, short bowel syndrome and nutrition support with the aim of learning about the approach and management of clinical problems from a different perspective, discussing controversial areas and making new contacts (hopefully without being too much of a nuisance)

Methods. Superb advice in planning for this fellowship was gratefully received from Professor George Johnston (former Traveller and Member), Mr Colin Russell (Member and Vice President) and Professor James Garden (Traveller, Member and Honorary Secretary). Specific hosts were chosen and approached in trepidation after consideration of personal recommendations, international standing, presentation and publication quality and special interests. Amazingly, all the hosts approached responded positively with promptness and enthusiasm. Even the home institution cooperated by granting discretionary leave of absence and my consultant colleagues were very supportive in facilitating my travels by so ably looking after emerging patient problems in my absence.

Results. My hosts went to an enormous amount of trouble to organise itineraries for me, to facilitate me in making travel arrangements and in providing wonderful hospitality in their institutions and their homes. As a result, the trip was hugely successful with a wide range of medical (Grand Rounds, Conferences, Clinics, Journal Clubs, Research Meetings, real ward rounds; attendance in operating rooms, endoscopy suite, pelvic floor laboratory; one-to-one meetings; and invited lectures) and social (trips to see the sights of the world, invitations out to homes and restaurants for lunches and dinners, and visits to ice hockey games, concert hall, aquarium and IMAX cinema) activities included.

Conclusion. The James IV Association of Surgeons are to be congratulated on this Travelling Fellows Programme. It has been very helpful to me professionally and personally as well as being a pleasure to have this opportunity to visit these expert surgeons, physicians and scientists in these outstanding institutions.

PART 1

Visit to The Division of General Surgery, Mount Sinai Hospital, Toronto and University of Toronto Faculty of Medicine 8th-15th June 2003

Aim of visit

To visit a centre of excellence for the research into and management of inflammatory bowel disease and for pouch surgery.

About Mount Sinai Hospital and Division of General Surgery

Mount Sinai Hospital is a 462 bedded patient care, teaching and research hospital. The Mount Sinai Department of Surgery, chaired by Dr Cohen, has 4 major divisions – general surgery, orthopaedic surgery, urology and plastic surgery. Within general surgery, the priority areas are inflammatory bowel disease, gastrointestinal oncology, breast disease and endocrine surgery.

About the Host

Dr McLeod is Head of the Division of General Surgery and Professor of Surgery and Head of the Surgical Clinical Epidemiology Group at the University of Toronto. Dr McLeod and Dr Cohen at Mount Sinai have a huge experience of pouch surgery and have published extensively on inflammatory bowel disease, colorectal surgery and in particular pouch surgery.

Arrival

I travelled from Belfast to Toronto, where I arrived 6 hours later than anticipated at 3.30am on Sunday 8th June. I had been advised that the Delta Chelsea Hotel was close to Mount Sinai Hospital and this proved to be an excellent location to be based.

The Visit

Sunday June 8th

I was picked up shortly after noon by my host, Dr Robin McLeod and introduced to her husband John and daughters Claire and Stephanie. They took me on a 2 hour drive to Niagara on the Lake for lunch in Shaw Café and Wine Bar. This town was a hive of activity during the Shaw Festival Week and we did a tour of the main street before heading off to see the nearby Niagara Falls. This was a tremendous welcome to Toronto and Canada and the journey to and from Niagara was a wonderful opportunity to get to know my host and her family as well as a lot about Mount Sinai, Toronto and Canada.

Monday June 9th

Unfortunately between planning this trip and its occurrence, Toronto had been hit by the **SARS** virus. This outbreak caused a lot of fuss getting in and out of hospitals as well as the country. Each day began with a sign in and handing over of identification at the staff entrance, alcohol wipes to the hands and filling in of health declaration forms and then

health questioning by the hospital staff. Thankfully, my host, Dr McLeod picked me up from the hotel and showed me the ropes of entering the hospital the first morning.

Dr McLeod introduced me to **Dr Zane Cohen**, Chief of Surgery and gave me a tour of the Department of Surgery. This department was well laid out with waiting areas, secretaries, doctor's offices and clinical examination rooms and minor procedures room all in close proximity. We discussed the plan for the week which had been extremely well thought out to give me a great variety of activities to see and participate in.

In the morning I attended a **Resident Research Forum** and heard very interesting presentations from their colorectal fellow Dr Paul Johnson and from 3 of the residents on their surgical scientist programme (Drs Ko, Cleary and Moozar) who presented their studies and handled questions on infertility after pouch surgery, defective post-hepatectomy cell cycle regulation, gene polymorphisms in colorectal cancer and genetic susceptibility to pancreatic cancer.

I was next taken to **lunch** by Dr McLeod and Dr Cohen in Osgoode Hall. This was a tremendous setting of the great hall of the Law Society of Upper Canada. It was also a great opportunity to discuss colorectal surgery, surgical training and hospital organisation.

In the afternoon, the Chief Resident of general surgery held **ward rounds** in the classroom at which I was invited to attend and discuss the five complex cases presented with the residents and colorectal fellows.

This was followed by the **Inflammatory Bowel Disease Multidisciplinary Ward Round** (5-6pm) which was chaired by Dr McLeod and attended by the gastroenterologists, surgeons, pathologists and radiologists as well as the colorectal fellows and residents. Challenging cases of inflammatory bowel disease with associated severe dysplasia and of colorectal cancer were presented and an open vigorous dabate ensued.

After this, Dr McLeod took me on a **real ward round**, were patients are actually seen, examined and talked to on her way to the resource centre for the **General Surgery Journal Club** which ran from 6.30-8pm for all the residents and colorectal fellows. Dr McLeod chaired this journal club which was using material from the Canadian Association of General Surgeons on Evidence Base Reviews in Surgery. The articles chosen were on gastro-oesophageal reflux as a risk factor for oesophageal cancer for which Dr McLeod had invited a visiting oesophageal surgeon to attend. The second article was a user's guide to the medical literature on how to use an article about harm. This journal club, with Chinese food provided, was very stimulating and well organised and used a logical structured approach.

Tuesday June 10th

I joined Dr Cohen and Dr McLeod in the **Operating Room**. I joined Dr Cohen for a very nice demonstration of a transanal repair of a rectovaginal fistula in a patient with Crohn's disease. I then joined Dr McLeod for a restorative proctocolectomy. It was very interesting to see the similarities of techniques and also differences in instruments used for dissection and a different method of using the staplers to construct the pouch.

In the afternoon, I visited the **Surgical Skills Centre** at Mount Sinai Hospital of which Dr Helen McRae was director. This centre allows students and residents to practise their surgical skills on realistic models. I was given a tour of the facility which contains a state of the art teaching facility, laboratories, preparation rooms and offices. The facilities looked excellent and I was sorry not to be able to see a course in progress.

In the afternoon, I had appointments with **Dr Hillary Steinhart**, Chief of Gastroenterology at Mount Sinai and **Dr Robert Gryfe**, surgeon in the Department of Surgery and a distinguished graduate of the Surgeon Scientist Programme. Dr Steinhart has a major interest in inflammatory bowel disease and the approach to inflammatory bowel disease, their participation in multicentre trials and their research programme in the genetics of inflammatory bowel disease. Dr Gryfe also has a major colorectal surgical interest as well as being very much involved in research in collaboration with Dr Steven Gallinger. The major focus of their research is on the genetics of pancreatic and colorectal cancer.

Wednesday June 11th

In the morning, I joined Dr Helen MacRae, colorectal surgeon in the Operating Room. Dr MacRae has a major interest in laparoscopic colorectal surgery and very much enjoyed seeing her perform a laparoscopic re-do ileocaecal resection for Crohn's disease followed by a laparoscopic sigmoid colectomy for diverticular disease. These operations were beautifully performed and explained.

In the afternoon, I met with **Dr Richard Reznick**, R S McLaughlin Professor of Surgery and Chairman of Department of Surgery. Dr Reznick has a major interest in surgical education and took me on a guided tour of his department and then took me on a tour of the University of Toronto **Centre for Research in Education**. The Department of Surgery runs a Fellowship in Surgical Education to prepare surgeons for a career as surgical educators. I was privileged to be introduced to **Dr Stan Hamstra** (educational psychologist and Director of the Office of Surgical Education), **Professor Niall Byrne** (educationalist and epidemiologist) and **Dr Adam Dubrowski** (kinesiologist) at the Centre and to hear about the Fellowship Programme and their research. Later in the afternoon, I met some of the surgical fellows who were doing the surgical scientist programme and was able to discuss their projects.

In the evening, I was invited to **lecture** at the General Surgery Rounds in Mount Sinai Hospital on the subject 'New Bugs for the Gut – Probiotics and IBD'.

In the evening, I was invited out to **dinner** at Monsoon restaurant on Simcoe Street with colorectal fellows (Paul Johnston, Steve Kelly and Kevin McCallion) and Dr Marcus Burnstein (colorectal surgeon at St Michael's Hospital, Toronto). Dr Burnstein runs the Colorectal Fellowship Programme in Toronto, on which one of our surgical trainees was being trained at that time (Kevin McCallion). This was an extremely enjoyable and amusing evening.

Thursday June 12th

The morning was spent in the **Operating Room** with Dr Robin McLeod who was running two rooms in the absence of Dr Cohen as well as doing some broadcast work, and nipping back and forward to her office. In this task she was assisted by Dr Steve Kelly (a colorectal fellow and UK trainee from Basingstoke. It was great to see a range of small procedures (transanal excision of rectal villous adenoma; examination under anaesthetic for Crohn's fistula in ano) as well as a perineal proctectomy

In the afternoon, I was taken to meet **Dr Khursheed Jeejeebhoy** in Medical Sciences Building. Dr Jeejeebhoy is a world-renowned gastroenterologist with a special interest in short bowel syndrome, home parenteral nutrition and nutritional research. It was a great opportunity to meet with him and discuss problems faced by home parenteral nutrition patients (chronic pain management, infection control, recurrent line infections, treatment of osteoporosis, investigation and treatment of disturbed liver function tests, chromium deficiency and manganese toxicity).

Later in the afternoon I met with **Dr Mark Silverberg**, a clinical gastroenterologist who has clinical interests in colon cancer screening and inflammatory bowel disease and research interests in the genetics of inflammatory bowel disease.

In the evening I was invited to the **Colorectal Journal Club** at the Faculty Club, University of Toronto for dinner and then to **lecture** to the Club on 'Surgery for Intestinal Failure and Entercutaneous Fistulae – Northern Ireland Experience'.

Friday June 13th

I was invited to visit St Michael's Hospital, Toronto by Dr Marcus Burnstein. I was accompanied by Kevin McCallion. Dr Burnstein took us to his office where he discussed details of the patients and operations we were to see. We then joined Dr Burnstein in the **Operating Room**. The first was a patient for insertion of an artificial bowel sphincter (Acticom Neosphincter) for faecal incontinence on a background of a history of imperforate anus. Dr Burnstein had been involved in a multicentre study of the use of these artificial sphincters. This was the first artificial bowel sphincter I had witnessed and it was demonstrated and explained with great clarity. The second patient underwent anal sphincter repair. Here it was interesting to see a different approach in terms of position (prone) and different instruments and suturing technique being used.

Saturday June 14th

I obtained a panoramic view of the city of Toronto on Saturday by visiting CN Tower before moving on to explore the harbour front and downtown Toronto.

On Saturday evening, I was taken out to the Old Country Inn in Unionville for a farewell **dinner** with Kevin and Eileen McCallion.

Visit to The Department of Colorectal Surgery, Cleveland Clinic, Cleveland, Ohio
15-18th June 2003

Aim of visit
To visit an international centre of excellence for colorectal surgery
To meet Nutrition Support Team, Intestinal Rehabilitation Team and Home Parenteral Nutrition team

About The Cleveland Clinic and Department of Colorectal Surgery
The Cleveland Clinic opened in 1921 and has grown progressively since that time. Currently there are 600 physicians at the Clinic. The Department of Colorectal Surgery at the Cleveland Clinic was set up in 1968 with Dr Rupert Turnbull as Chairman. Dr Turnbull was succeeded by Dr Fazio in 1975. The Department has developed an international reputation and has expertise in surgery for Crohn's disease, pouch surgery, laparoscopic colorectal surgery and familial polyposis syndromes.

About the Hosts
Dr Fazio is Rupert B Turnbull Chairman, Department of Colorectal Surgery and Professor of Surgery, Cleveland Clinic Foundation. Dr Fazio is a world-respected authority in colorectal surgery and especially in surgery for inflammatory bowel disease. He is a member of The James IV Association of Surgeons.
Dr Henderson is Chairman, Department of General Surgery and Professor of Surgery, Cleveland Clinic Foundation. Dr Henderson is a liver transplant surgeon, who trained in Edinburgh and Emory University before moving to Cleveland Clinic in 1992. Dr Henderson is also a member of The James IV Association of Surgeons.

Arrival
I travelled from Toronto to Cleveland where I was met by courier and taken to the Intercontinental Hotel and Conference Centre at the Cleveland Clinic. This is a luxurious facility, linked by overhead walkway to the Clinical and Research buildings of the Cleveland Clinic.

The Visit

Sunday June 15th

Shortly after arrival in Cleveland, Dr Steiger, Co-Director of the Nutrition Support Team collected me from the hotel for **Dinner** with the Nutrition Support Team at Blue Point Grill, downtown Cleveland. This was a wonderful start to my visit to The Cleveland Clinic and allowed me to meet and talk informally to the clinical fellows, dietitians and pharmacists who made up the Nutrition Support, Intestinal Rehabilitation and Home Parenteral Nutrition Teams.

Monday June 16th

I was collected from the Hotel by Dr Ann Brannigan, Colorectal Clinical Fellow at 7.10am and taken to the Lerner Research Institute which has beautifully furnished lecture rooms and research labs and is to be the home of the new Cleveland Clinic Medical School due to open in 2004. I was invited to give a **Lecture to the Digestive Diseases Centre Group** on 'Enteric bacteria, gut barrier dysfunction and probiotics in Inflammatory Bowel Disease'. This was a very knowledgeable audience and the talk led to a very good discussion time.

I was then taken on a **Tour of the Digestive Diseases Center** by Dr Fazio. This is an excellent facility with gastroenterologists on one side of the floor and colorectal surgeons on the other side and beautifully appointed rooms to see patients and carry out 'office' procedures. Behind this outpatient suite were the offices of the Department of Colorectal Surgery where the surgeons were organised beside their secretary and adjacent to the nurse clinicians, case workers, administrators, education organisers and database managers. The organisation of the offices, the databases and the availability of computer expertise and statistical help were very impressive.

I then met with **Nutrition Support Team Director** Dr Doug Seidner, a gastroenterologist and endoscopist. It was great to hear about the organisation of their nutrition support team in terms of day-to-day organisational issues and the different intestinal rehabilitation and home parenteral nutrition programs.

My next appointment was with **Dr Michael Henderson, Professor and Chairman of General Surgery**, Cleveland Clinic. Dr Henderson, gave me a tour of the Department of General Surgery and showed me the computerised admission process which is extremely well organised and comprehensive. He also showed the very impressive suite of offices for the breast service, which was beautifully furnished and dignified and functional.

Dr Steiger introduced me to **Home Parenteral Nutrition Team**, who see all the patients in hospital who are potential home patients or who actually planned for home on parenteral nutrition. This team is very impressive and have a very comprehensive and well maintained real time database and clear goals for patient progress. We discussed their home parenteral nutrition clinic and monitoring of drugs and blood tests. They have very good, clear documentation and information for staff and patients.

I met with Laura Matarese who is **Director of Intestinal Rehabilitation**. We discussed the intestinal rehabilitation program which aims to provide a comprehensive range of interrelated services for the patient who has severe gastrointestinal failure or dysfunction. The aim of the intestinal rehabilitation program is to enhance intestinal adaptation through dietary modification and the use of growth factors and hormones.

I had lunch with **Dr Conor Delaney**, colorectal surgeon, trained in Ireland, Pittsburgh and Cleveland Clinic and has a major interest in laparoscopic colorectal surgery and in accelerated discharge after colorectal surgery. In the afternoon, I joined Dr Delaney and then Dr Senagore in the **Operating Room**. Dr Delaney performed an operation to restore colonic continuity and Dr Senagore carried out a restorative proctocolectomy for ulcerative colitis complicated by colonic cancer. I then joined Dr Delaney in his office to review videos of laparoscopic colonic procedures and discussed in detail the accelerated discharge they use after open surgery and how that compares with discharge after laparoscopic colonic surgery.

That evening I was invited to **Lecture** to the Department of Colorectal Surgery on the topic 'The Northern Ireland Intestinal Failure Experience – Presentations, Predictions and Procedures'. Dr Fazio presented me with a history of the Cleveland Clinic, a Cleveland Clinic tie and a parchment to celebrate my Visiting Professorship.

After the lecture I was invited to **Dinner** with Dr and Mrs Fazio; Dr and Mrs Church and Dr and Mrs Delaney in the Intercontinental Hotel. This was a very pleasant way to end a whirlwind day at the Clinic.

Tuesday June 17th

I was met at 7am in the morning by Dr Doug Seidner, **Director Nutrition Support Team** and taken on tour of Cleveland Clinic. We visited the spacious, luxurious and orderly library, the lecture theatres and then the offices of the Nutrition Support Team. Here I met the nursing staff, dietitians and pharmacists and heard about how the nutrition support team is organised. I was presented with a copy of the 'Nutrition Support Handbook' for the hospital and we discussed issues around in-hospital versus home trainin, discharge planning and arrangements for review and discontinuation. The six nutrition nurses do the venous access procedures, dressing of the central lines and some in hospital training in preparation for home parenteral nutrition.

My next appointment was with **Dr Charles Bevin**, immunologist faculty, who has special expertise in Defensins, naturally occurring antibiotic peptides of mucosal epithelium. Dr Bevin had published extensively in this area and has a particular interest in how understanding microbial defense mechanisms in Inflammatory Bowel Disease.

Later that morning, I joined **Dr Fazio in the Operating Room** or should I say Rooms as Dr Fazio had two rooms running full blast all day as he oscillated from room-to-room. He closed a loop jejunostomy, widely excised anal Bowen's disease, excised a pelvic pouch

for pouch dysfunction and replaced it with a Koch pouch, excised a pelvic pouch for a pouch-cutaneous fistula and formed a new pelvic pouch, excised a recurrent rectal cancer using intra-operative radiotherapy followed by colon-pouch-anal anastomosis. This was an amazing day's operating and it was great to see 'The Master' at work.

That evening, I was taken out to Dr Henderson's house and then out to **Dinner** with Dr and Mrs Henderson and colleagues from the Department of General Surgery. This was a very pleasant evening where we discussed surgical training, the impact of laparoscopy on general surgery and the applications of the computer and internet to surgical practice.

Wednesday June 18th

At 7am, I joined the CORS (colorectal service) **Case Management Conference** which was chaired by Dr Fazio. Here cases were presented by the residents who stopped at stages to seek opinions before moving on to the next stage of the case presentation as the patient history unfolded. The cases presented were complex and had challenging management decisions and a very open and honest discussion took place concerning the surgical and investigative options at different stages

After the Conference, I joined Dr Fazio to make **Rounds**. We were able to discuss the organisation of the colorectal beds (38 in total) and how these patients were managed. The colorectal fellows had encyclopaedic knowledge of the patients and the nurses showed no interest in the doctors rounds. It was interesting to meet relatives staying in every room and taking a detailed interest in a patient's care.

I then met with **Dr Feza Remzi**, colorectal surgeon who has been on faculty for 5 years having previously carried out his residency and fellowship at the Cleveland Clinic. Dr Remzi runs the pouch database in collaboration with a nurse. There are a whole series of these databases with each faculty member responsible for maintaining a database. Dr Remzi has been very energetic in the extraction of data from the pouch database which now amounts to 2700 patients leading to 30 abstracts and 10 publications in the previous year.

I was given a tour of the **Colorectal Research Facility** by Ingrid Kobe, Research Nurse Manager and introduced to Elena Manilich who is a computer programmer who works full-time in the Department designing, improving and troubleshooting for the databases. The amount of information contained in the databases was very impressive including photographs of X-rays, gross pathology and endoscopic appearances.

Finally I was given a tour of the **Clinic Rooms** and meet some of the nurse clinicians who meet the patients first, take a full history and do a full examination and record all the information of the computer. These computer terminals allow access to all the laboratory results and allow viewing of all the relevant X-rays.

The visit was completed with debriefing and farewell meetings with Dr Fazio and Dr Henderson.

Visit to Department of Critical Care Medicine and Thomas Starzl Transplantation Center, University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania
June 19-20th 2003

Aim of visit
To visit the research laboratories of Dr Mitchel Fink and to visit the Visceral Transplant Unit at University of Pittsburgh Medical Center

About UPMC
This is a group of large hospitals (Presbyterian, Montefiore, Children's Hospital of Pittsburgh), all stretching up towards the sky and connected with each other and with University buildings at multiple levels by covered walkways. These institutions have a large trauma unit, emergency helicopter system, multiple intensive care units and a very large transplant program.

About the Host
Dr Fink is Professor of Surgery and Critical Care Medicine and Chief of Critical Care Medicine at University of Pittsburgh Medical Center. He has published widely in the fields of gastrointestinal surgery and surgical critical care. He is a member of the James IV Association of Surgeon

Arrival
I travelled on Wednesday afternoon June 18th from Cleveland to Pittsburgh where I checked into a hotel within the Oakland superb of Pittsburgh within close walking distance of UPMC and in the middle of the University area.

Thursday June 19th

The morning started with a visit to the **University Department of Critical Care Medicine** where the administrative staff gave me a tour of the departmental offices and introduced me to Dr Tisherman and Dr Angus, senior faculty in Critical Care. I had an interesting morning of **Meeting**s with researchers and clinical faculty. Dr Tenhunen, a Finnish visiting researcher described his work on the use of polymers to lower blood viscosity and improve organ blood flow and oxygen delivery. Dr Vodovotz, a scientist described his studies into the mathematical modelling of the body's response to sepsis. These studies aim to develop a model which can be used to identify stages of the septic response and to predict response to treatment at these stages. Dr Tisherman, Assistant Professor of Surgery and Critical Care Medicine described the organisation of trauma surgery and critical care medicine within the Center and the interactions with the helicopter emergency service. Dr Tisherman works partly as a Trauma surgeon, partly in Intensive Care and organizes the teaching of third year medical students. Dr Ochoa, Associate Professor of Surgery and Critical Care Medicine gave me a tour of the Hospital, including the emergency room, the theatres, and the intensive care units (surgical, neurosurgical, transplant, cardiothoracic). During our travels we met a robot fridge carrying blood samples from the wards to the laboratories.

In the afternoon, Dr Ochoa introduced me to Dr Kareem Abu-Elmagd, Professor of Surgery and Transplantation in the **Thomas Starzl Transplantation Center**. The Transplant program in Pittsburgh was built up by Dr Starzl and has been very successful. Currently about 300 transplants are done per year and encompass heart, heart-lung, renal, pancreas, intestinal and multi-visceral. I spent the afternoon with Dr Abu-Elmagd joining him for a case conference with his physician's assistant, coordinator, social worker and nurses and then for a visit to the Transplant Pathology Department for the daily review of intestinal pathology and decisions regarding dosages of immuno-suppressants. I was privileged to see Dr Abu-Elmagd get a patient set up for a multi-visceral transplant that evening and the start of a procedure that was expected to last 13-14 hours.

That evening, I was invited to **Dinner** at Dr Fink's home with Dr Vodovotz and Dr and Mrs Angus. This was a wonderful evening with superb hospitality and entertaining conversation in a relaxing, elegant environment.

Friday June 20th

This morning, I was given a tour of Dr Fink's **Research Laboratories** with Dr Yang, a Chinese gastroenterologist who was carrying out research using into resuscitation fluids using models of haemorrhagic shock, necrotising pancreatitis, alcohol-induced liver injury and obstructive jaundice.

The remainder of the day I spent in **Meetings** with Clinical Scientists. I had a very productive and fascinating meeting with **Dr Fink** during which we discussed resuscitation fluids, models of intestinal injury and inflammation and their work on the anti-inflammatory properties of nicotinamide adenine dinucleotide. I met with **Dr Billiar,** Professor and Chair of the Department of Surgery. Dr Billiar is a trauma surgeon and surgical scientist and we discussed academic surgical careers in USA and the organisation of general surgery, trauma surgery and the trauma intensive care unit in Pittsburgh. We discussed the need for the helicopter emergency service due to the complex geography of the region (very hilly countryside with 2 rivers and a traffic system which tends to get snarled up), the numbers of trauma admissions (3600 per year) and the use of videotapes in the emergency room to review adequacy of care. We also discussed Dr Billiar's interest in haemorrhagic and traumatic shock and in Nitric Oxide pathways. We had very interesting discussion regarding developments in vascular surgery and emergence of vascular physicians and about the growth in bariatric surgery in USA.

In the afternoon, I met with **Dr Bruce Pitt** who is Professor and Chairman of the Department of Environmental and Occupational Health. Dr Pitt has a basic science laboratory actively interested in pulmonary inflammation in particular emphysema and chronic obstructive pulmonary disease. We discussed experimental models of lung injury, cell culture work and the work of a variety of epithelial research groups at the University of Pittsburgh.

Attendance at Annual Meeting of American Society of Colon and Rectal Surgeons June 22nd -26th 2003

Aim of visit
To attend the Annual Meeting of the American Society of Colon and Rectal Surgeons for the first time

About the meeting
This is a large national specialist colorectal surgical meeting with original presentations, themed symposia, core subject updates, invited lectures and poster sessions.

Arrival
I travelled from Pittsburgh via Charlotte to New Orleans on Saturday afternoon June 20th where I checked in at a hotel in the French Quarter.

The visit

Sunday June 22nd June

I attended the Annual Meeting of American Society of Colon and Rectal Surgeons where there were a variety of themed **Symposia** on old and new devices for advanced haemorrhoidal diseases, innovations in colorectal cancer management, post-operative ileus, promising therapies for faecal incontinence and core subject updates on Crohn's disease surgery, GI bleeding, sexually transmitted disease, ostomies and stomal therapy. The core subject updates were definitely the weakest sessions being overly ambitious in its spectrum of discussion. A session on colon and rectal anatomy and physiology was very elementary. These updates appeared to be aimed at residents and general surgeons but were too fast and too superficial to be of much use to the practising colon and rectal surgeon.

The educations sessions were followed by a **Welcome Reception** were it was nice to meet up with Faculty and Fellows from Toronto, Faculty from Cleveland Clinic, Cleveland and a colorectal colleague from Belfast.

Monday June 23rd

During this day at the Meeting, I attended **Scientific Programs** on 'Rectal Cancer (Staging and Adjuvant Therapy)', 'Carcinoma, carcinoids and local treatment', 'Benign colorectal disorders', 'Anal neoplasia, HIV and salvage' as well as the President's address (Dr Richard Bellingham) and a Lecture on 'Decision making in the age of Evidence Based Medicine' by Dr David Rothenberger. The President's address was philosophical and challenging while Dr Rothenberger gave an excellent presentation on what it takes to be a master surgeon.

That evening I was invited to attend the **University of Toronto Alumni reception** and dinner at Arnaud's Restaurant. This was an excellent event hosted by Dr Zane Cohen and organised with enthusiasm by Dr Marcus Burnstein.

Tuesday June 24th

During this day, I attended **Scientific Programs** on 'Inflammatory Bowel Disease – Ileal Pouches' and 'Disorders of Physiology- Faecal Incontinence and Rectal Prolapse' as well as an invited lecture on birth and the Pelvic Floor by Professor Ronan O'Connell, Dublin. This was an outstanding lecture elucidating the basic anatomy and physiology of the pelvic floor in women and describing the changes and injuries to the pelvic floor during childbirth that have been demonstrated by pelvic floor MRI and dynamic MRI and the changes that have been demonstrated by endoanal ultrasound. There was an emphasis on the cumulative effect of successive pregnancies on pelvic floor function and a discussion of the possible mechanisms of pudendal nerve injury during delivery.

The afternoon was spent visiting the **Audubon Aquarium** of the America and the Entergy **IMAX** Theatre to see Matrix Reloaded in the company of British Traveller at the American Society of Colon and Rectal Surgeons – a welcome break from the intellectual stimulation of that Society's meeting.

Wednesday June 25th

The American Society's program for Wednesday provided **Scientific Programs** on 'Anorectal disorders – fissures, fistulas, haemorrhoids', 'Colorectal Research' and 'Laparoscopy and Colonoscopy' which enabled the Scientific Program to cover a large number of areas of interest.

There were also two excellent **Invited Lectures**. The first was entitled 'Rectal Cancer Surgery; The Century since Ernest Miles' by Professor John Northover, London. This was a wonderful lecture detailing the history of surgery of rectal cancer with a St Mark's slant – detailing the contributions made from St Marks and other institutions providing photographic recordings from 1930s, 1950s and also TME as done by Bill Heald. This was a truly masterful account done with superb insight and explanation and would benefit from being made into a video.

The second invited lecture was on 'Ethics and the Colon and Rectal Surgeon' by Dr Ira Kodner, St Louis. This was a very good lecture given by an expert colorectal surgeon who has developed a particular interest on how ethics are intrinsically involved in surgical practice; introducing the theory of medical ethics and describing different aspects. Dr Kodner then gave a superb personal illustration of his interaction with a particular patient as an illustration which brought almost the entire audience to a standing ovation.

Thursday June 26th

On the final day of the conference I attended the **Impact Paper** for 2002 and **Greatest (Colorectal) Hits 2002** – summaries of papers. This was an interesting idea to nominate the best paper in the DCR in 2002 (Impact Paper for 2002) and to present its findings and it was gratifying to see it was a UK paper and from a group I know well and have worked

with in the past (George, Kettlewell and Mortensen, Oxford). Papers had also been selected in a number of different areas (colorectal cancer surgery, genetics/tumour biology of colorectal cancer, benign anorectal disease, pelvic floor disorders and inflammatory bowel disease) as being the best in that field published in any journal in 2002 (Colorectal Hits). Again the results of these studies were presented. Some of the nominated discussants explained their method of selecting the paper (using Medline searches; looking for randomised controlled trials; discussing with colleagues before making selection). Some of the discussants just explained the paper; others went on to explain why they felt the paper was important and should be highlighted. The standard of these discussants ranged from being poorly explained to being excellent. This was therefore a very interesting idea but could have been of a much more consistently high standard.

Later in the morning there were short **Research Presentations** by the International Scholar (Dr Terzi, Turkey) and the British Travelling Fellow (Mr Kourosh Khosraviani, Belfast, UK). Unfortunately no time was allowed for questions. This I believe was a mistake as it may have been useful for the audience to tease out any areas they did not understand and it was also difficult for the travelling fellows to know how well their presentations have been received.

There followed **Symposia** on Colorectal Surgical Video Presentations and concerning Colorectal Laparoscopy and Treatment of Liver Metastases. Lastly there was a **Consultant's Corner Session**. This was chaired by Dr Abcarian, Chicago who presented three patient-based scenarios stopping at intervals to ask his distinguished panel what the differential diagnosis was and what should be done next and gradually revealing the full story.

The meeting was well organised, covered a wide variety of colorectal diseases and techniques and used a good range of approaches to present the sessions. The meeting also gave an opportunity to make new acquaintances and to reinforce old contacts. It was well worth the time spent.

Friday June 27th

I departed New Orleans for Belfast via Newark, New Jersey and Toronto, arriving in Belfast on Saturday 28th June.

PART 2

Visit to Division of Colon and Rectal Surgery, Mayo Clinic, Rochester, Minnesota
1-5 December 2003

Aim of visit
To visit an internationally renowned centre and group of colorectal surgeons.
To visit the Nutrition Support and Home Parenteral Nutrition Teams

About the Clinic and the Division of Colon and Rectal Surgery
The Mayo Clinic is a charitable not-for-profit organisation based in Rochester, Minnesota with Clinics also in Scottsdale, Arizona and Jacksonville, Florida. In Rochester, the Clinic houses a 1,595 physician group practice and has two main hospitals in St Marys Hospital (1,157 beds) and Rochester Methodist Hospital (794 beds) as well as a network of clinics and hospitals in Minnesota and neighbouring states. There are eight surgeons in the Division of Colon and Rectal Surgery which is chaired by Dr Heidi Nelson: Dr Santhat Nivatvongs, Dr Bruce Wolff, Dr John Pemberton, Dr Richard Devine, Dr Eric Dozois, Dr David Larson and Dr Robert Cima. The Division is a major referral center for all types of colorectal problems and has been at the forefront of advances in laparoscopic colon and rectal surgery.

About the Host
Dr Heidi Nelson is Chair of Division of Colon and Rectal Surgery and Professor of Surgery at the Mayo Clinic. Dr Nelson trained in general surgery at Oregon Health Sciences University in Portland, Oregon and in colorectal surgery at the Mayo Graduate School of Medicine, Mayo Clinic, Rochester. Dr Nelson's major clinical interest is in the surgical treatment of primary and recurrent colon and rectal cancer. Dr Nelson is a former James IV Association of Surgeons Traveller.

Arrival
I travelled on Sunday 30th November 2003 from Belfast via London and Minneapolis/St Paul to reach Rochester where I checked into a hotel directly opposite Rochester Methodist Hospital and linked by a subway to all of the buildings on the main campus.

The Visit

Monday December 1st

The morning started with a visit to the **Education Department** in the Siebens Building to be registered as a visiting physician, issued with name badge and a welcome pack containing details about the Mayo Clinic, maps of the Mayo Campus, Proceedings of the Mayo Clinic and a list of educational opportunities for the week. I was then directed to the offices of the **Division of Colon and Rectal Surgery** where I met with the Education Secretary of the Division, was introduced to Drs Nelson, Devine, Dozois, Larson and Cima and was given a tour of the Division.

Discussions with the Colon and Rectal Surgery Divisional faculty, secretaries and fellows brought out very clearly the **organisational prowess** of the Clinic, in terms of physical space, multi-disciplinary approach and collegiality, and in use of time, skills and facilities. The organization of the Divisional space is excellent with co-location of all of the consultant offices beside the offices of their secretaries, the consultant's nurses, the education secretary and the lecture theatre. The offices are located right beside the colon and rectal clinic space with rooms for consultation, minor procedures, colonoscopy, recovery and patient education. In addition, the colon and rectal surgery suite is integrated horizontally with the 3 other main specialties which deal with colorectal disease, namely gastroenterology, medical oncology and radiation oncology. The colorectal oncologists are integrated vertically within the cancer center. The organisation of surgeons into blue and orange teams with respect to use of clinic space and operating rooms on alternate days maximises the use of the surgeons' time to do what they are trained to do (operate). The organisation of the residents, fellows and nurses to work with the consultants also maximises surgical efficiency and left one very envious.

Monday was a quiet day surgically as it followed a holiday period and I took the opportunity to go on a **Public Tour** of the Mayo Clinic which started with a 15-minute film introducing the founders of the Clinic and detailing the history of the Clinic and the associated hospitals. There followed a wonderful tour of the Clinic buildings during which we were taken to see a photographic display of the lives of the Mayo brothers, the Mayo brothers' offices, architectural and art features of the many buildings and a display featuring the Nobel prize winning work of Drs Hench and Kendall in the discovery of cortisone. I was impressed by the splendid design and layout of the buildings as well as their cleanliness and smoke-free status.

In the afternoon, I attended a **Concert** from the Honors Concert Choir in the Hage Atrium. Concerts are held weekly through the generous sponsorship of a past patient of the Mayo Clinic. I then visited and spent some time in the **Medical Library** which was extremely well equipped with computer terminals and had a very good range of journals and book. I also visited the well equipped **Medical Bookshop** and had an opportunity to meet with prospective medical students who were attending for interview.

Tuesday December 2nd

The day started with a short bus ride in the Employee Shuttle bus from the main Mayo campus to St Marys Hospital to join Dr Eric Dozois in the **Operating Room** and then a tour of his patients in the hospital with his nurse whose appointment is as a physician extender. Dr Dozois showed me the Mayo computerised record system allowing access to operating lists, office schedule, blood and X-ray results as well as capability to view the X-rays themselves.

I then travelled to Rochester Methodist Hospital to join Dr David Larson in the **Operating Room** who was performing a hand-assisted laparoscopic proctocolectomy with ileostomy on a patient with inflammatory bowel disease and faecal incontinence. It

was very interesting to see the range of equipment and techniques used to successfully complete this procedure in an anatomically challenging patient.

Wednesday December 3rd

The morning started with the **Wednesday Morning Conference** of the Division of Colon and Rectal Surgery at 7am in the Al Naboodah Lecture Hall within the Divisional Offices. This meeting started with a case presentation on a patient with multiple colonic polyps a rectal polyp-cancer. This presentation was followed by a detailed discussion of genetic assessment, investigative approach and treatment options. I was then invited to give a **presentation** on 'Surgery for Intestinal Failure' to the group.

I then joined Dr John Pemberton for his **Operating List** at St Mary's Hospital. Dr Pemberton performed two operations – a proctocolectomy for slow transit constipation in association with faecal incontinence and the formation of an ileostomy. It was very interesting to see Dr Pemberton's approach to use of lighting and patient positioning as well as the choice of instruments and dissection techniques used in the elegant performance of these operations. I was then give a tour of the operating suite which incorporates 60 theatres, a number of consultant rest and work rooms and the pathology suite.

That evening I was invited out to **Dinner** with the Division of Colon and Rectal Surgery hosted by Dr Nelson at the Oak Room at the Marriott Hotel at which I was able to talk to the colon and rectal consultants, a colorectal fellow, a research fellow and Dr John Donohue, Professor of General Surgery and former James IV Association of Surgeons Traveller. We had a very interesting evening discussing surgical and colorectal training, limits on work time, general surgery/colorectal boundaries and training of consultants in business methods.

Thursday December 4th

In the morning, I joined Dr Larson and his fellow in the **Operating Room** in Rochester Methodist Hospital to see them perform marsupialisation of a pilonidal sinus followed by a slick laparoscopic sigmoid resection for recurrent diverticulitis. It was very interesting to see the documentation for the surgical admission which was simple and comprehensive – all on the one sheet.

I then had an opportunity to **meet with Dr John Donohue**, Professor of General and Gastrointestinal Surgery who gave me a tour of the Offices and Clinic Space of the Division of General Surgery. I learnt about the organization of their consultants' time, provision of emergency general surgery and of trauma surgery, academic productivity and referral practices. Dr Donohue was very kind to set up meetings with Dr van Heerden and Dr Darlene Kelly. **Dr Jon van Heerden**, the senior consultant in general and endocrine surgery described the organisational set up between the endocrine physicians and surgeons, the educational and training opportunities for the fellows and his work as editor of 'Operative Techniques in General Surgery'. **Dr Darlene Kelly**, a

gastroenterologist and trained dietician, runs the home parenteral nutrition service for the Clinic along with a nurse and clinical pharmacist. This team works closely with the home parenteral nutrition service led by Dr Molly McMahon and her endocrinologist colleagues. Dr Kelly described the organisation and working of the team which usually looks after 80-100 patients on home parenteral nutrition. Dr Kelly was very kind to present me with the Mayo guide to Home Parenteral Nutrition and to introduce me to Dr McMahon. **Dr Molly McMahon**, an endocrinologist trained in nutrition support with Dr Blackburn in Boston and runs the nutrition support team in conjunction with colleagues from endocrinology, gastroenterology and preventive medicine. Dr McMahon described the organisation of the team, their computer support system (FEED- Feeding Effectively using Electronic Data) and arranged for me to attend the Nutrition Support Team Ward Round the following day.

In the afternoon, I joined Dr Eric Dozois in the **Operating Room** at St Marys Hospital where he performed with the help of his fellows and residents a series of major colorectal procedures – a restorative proctocolectomy, three sigmoid resections, a laparotomy with ileorectal anastomosis and a closure of loop ileostomy. This was a fascinating day with a number of complex cases, many with difficult intra-operative decisions to make, difficult pathology to deal with, involving different teams (pathologists, urologists, liver surgeon) and proceeding simultaneously in three different operating rooms with assistance from residents, chief resident and colorectal fellow. It would not have been possible to successfully finish this amount of work without the Mayo attitudes of facilitation, flexibility and collegiality. I was very impressed with the superb work up on the patients by the Mayo physicians prior to their consultation with the surgeon, the excellent support from other specialities (pathology, urology) and from the theatre management to facilitate the colorectal surgeon. It really did appear that the whole hospital was set around the clinicians with the aim of facilitating them in utilising their skills to their maximal efficiency.

Friday December 5th

I was invited to give a **Lecture** in the Division of Colon and Rectal Surgeons at 7am on 'Probiotics and IBD; new bugs for the gut'. This session was chaired by Dr John Pemberton, Professor of Surgery and previous James IV Association of Surgeons Traveller.

Next I joined Dr Dan Hurley, consultant in endocrine medicine and the other members of the **Nutrition Support Team** for their conference and ward round in St Marys Hospital. The Team meets every morning for conference for 40-60 minutes and discuss all new referrals to the team and discuss all the patients currently being monitored by the team. The team members present for this conference were in addition to Dr Hurley, an internal medicine resident, two dietitians, one nurse and one clinical pharmacist. The team functioned extremely well together and were very well organised. There was a printed list of all the patients in the hospital on parenteral nutrition, including a clinical summary, medications, flag indicators of organ dysfunction, nutrient and electrolyte monitoring and assessment of whether calorie requirements were being met. This computerised system

had been devised by the Marty Kochevar, a clinical pharmacist, whose knowledge, computer skills and organisational ability were very impressive. At the end of the conference, a number of patients had been identified who required a visit as part of the nutrition support team ward round. I joined the team for the ward round and was able to discuss their approach to prescribing, their approach to controlling blood sugar and their interactions with different specialities in the hospital.

In the afternoon, I had a debriefing and farewell meeting with Dr Nelson, visited the Medical Library and took some photographs of the Mayo Buildings and artwork. Dr Nelson presented me with 'Perspectives on Mayo' a book of pen and ink renderings of the Mayo Heritage by John Desley as a momento of my visit.

Visit to Colon and Rectal Surgery Associates Ltd (CRSAL) and University of Minnesota Minneapolis and St Paul
7-12 December 2003

Aim of visit
To visit an internationally renowned group of colorectal surgeons.

About the Group
This group practice was founded in 1963 by Dr Howard Frykman and Dr Stan Goldberg and has grown to become the largest group practice of colorectal surgeons in the world. They aim to integrate private practice with research and teaching. The Associates are affiliated to the University of Minnesota Division of Colon and Rectal Surgery and run an Annual Course on the Principles and Practices of Colon and Rectal Surgery.

About the Host
Dr David Rothenberger is the Endowed Academic Health Center Chair in Clinical Surgical Oncology and Chief of the Divisions of Surgical Oncology and Colon and Rectal Surgery at The University of Minnesota. He is past President and Chief Executive Officer of the CRSAL. He is also past President of the American Society of Colon and Rectal Surgeons and the American Board of Colon and Rectal Surgery

Arrival
I travelled on Saturday afternoon from snowy Rochester to snowy Minneapolis where I checked in to a hotel beside the university. It was difficult to work out in advance where to stay as the Group practises at hospitals throughout the Twin Cities but this location worked out well with a shuttle bus to the main hospital locations I needed to visit.

The Visit

Sunday December 7th

Invited to Dr Rotherberger's home in Roseville in the Minneapolis suburbs on the shores of one of the City's lakes for **dinner** with Dr and Mrs Rothernberger. I had a delightful evening finding out about my host, his family, their Irish connections, Minneapolis and St

Paul and the organization of the Colon and Rectal Surgery Associates. Dr Rothenberger did a detour on the way back to the hotel gave me a guided tour of St Pauls' city centre.

Monday December 8th

The morning started with a visit to the **business office of CRSAL** to make declaration about my health, avoidance of patient contact and preservation of patient confidentiality.

The next stop was at **Operating Theatres** in Fairview Medical Centre at Riverside campus to see Dr Susan Parker one of Associates with an interest in pelvic floor physiology carry out an operation to insert an artificial bowel sphincter.

Leaving Fairview, I travelled to the Abbott Northwestern Hospital to join Dr Goldberg for his afternoon in the **Operating Room**. It was great to see this world famous surgeon in action. It was also a pleasure to be in his company as his enthusiasm for surgical decision making, surgical technical skills, innovative techniques and teaching was endless. This group practice train 5 colorectal fellows each year in the private practice setting. The fellows received wonderful training, obtained a vast experience and worked exceptionally hard.

After the operation, I was invited to join Dr Goldberg to **make rounds**. This again was interesting and very educational and explanations and discussions continued between rooms and between floors.

I then joined Dr Rob Madoff for his **rounds** and saw patients with locally advanced rectal cancer treated by pelvic clearance, ulcerative colitis with primary sclerosing cholangitis, liver cirrhosis, and portal hypertension treated by TIPS and pouch and faecal incontinence due to paraplegia treated by loop ileostomy.

Dr Madoff invited me to join him in the **Operating Room** in the evening to see a patient having an abdominal colectomy and ileorectal anastomosis performed for familial multiple colonic polyps. It was good to see the different approach used with respect to incision, type of retractors and testing of anastomosis. It was also amazing to see a pathologist bring the opened colonic specimen back into the operating room to discuss with the surgeon at 7.30pm.

Tuesday December 9th

Invited to **Surgery Grand Rounds** at the University of Minnesota by Dr David Rothenberger which ran from 7-8am. This was chaired by Dr David Dunn, the Jay Phillips Professor of Surgery and Chairman of the Department of Surgery. The Grand Rounds took the form of two case presentations by residents followed by literature review and vigorous and forthright discussion of the management of the patients concerned. There then followed an excellent lecture by Dr Greg Beilman on 'Controversiesn in the management of Haemorrhagic Shock'.

I was then invited to join Dr David Rothenberger and his residents for **rounds** in Fairview University Hospital which is just adjacent to the University of Minnesota. We visited patients in 3 different ward areas in the hospital. This round included patients who had undergone re-do pouch surgery, laparoscopic sigmoid colectomy, rectovaginal fistula post rectal surgery at a different institution, locally advanced rectal cancer treated by palliative APER and vaginectomy and a patient with a non-functioning gracilis neosphincter. I was surprised at the lack of interest in the visits by the nursing staff and the lack of verbal communication between medical and nursing staff.

I travelled next to the **Centre for Pelvic Floor Disorders** in the Fairview Medical Centre at Riverside where I met Dr Susan Parker who gave me a tour of the unit and described the work that went on there. Several of the Colon and Rectal Surgery Associates as well as urogynaecologists and paediatric and adult urologists do sessions there. This a dedicated pelvic floor centre with facilities for endoanal ultrasound, EMG, evacuation defaecography, flexible endoscopy, and minor surgical procedures.

I was invited by Dr Anders Mellgren to see patients attending for **endoanal and endorectal ultrasound**. These investigations were being carried out to assess a post-operative rectovesical fistula after radical prostatectomy, an anal fistula and a patient with rectal cancer post chemoradiotherapy/

In the afternoon, I travelled to Abbott Northwestern Hospital to join Dr Goldberg again for his **operating list** on 3 patients with perianal fistulae. Again this was a delight as Dr Goldberg oozed charm, knowledge, enthusiasm, authority and experience. It seems everything in Minnesota is done in the prone jack knife position unless that proves impossible; and indeed it provided excellent exposure. It was interesting to see the safety measures employed in theatre under the slogan 'Pause for the Cause' where surgeon, anaesthetist and nursing staff check together the name of the patient and the operation to be performed. It was also of note that surgical technicians do most of the scrubbing in theatre rather than nurses.

Wednesday December 10th

Dr Rothenberger invited me to join him in his **operating room** for his all day list. The cases included a fistulotomy for fistula in ano associated with recurrent ischiorectal abscesses in the prone jack-knife position of course; a laparotomy for cancer in a bladder diverticulum and a mass adjacent to superior mesenteric vein identified on CT scan performed to investigate a raised CEA post sigmoid colectomy for cancer; debridement of abscess cavity in left flank for pancreatitis complicated by pancreatico-colic fistula; re-do surgery for reversal of Hartmann's procedure complicated by rectovaginal fistula; and re-do surgery for recurrent complicated Crohn's disease. This was a long and difficult day's operating characterised by extensive adhesions, difficult pathology and witticisms from Dr Rothenberger – 'dividing adhesions is like eating popcorn – you can't stop until you are finished'; and 'déjà vu all over again' when similarly dense adhesions were found in successive patients. In addition to seeing Dr Rothenberger undertake such difficult cases, the day in the operating room allowed me to see the close interaction between

urologists, surgical oncologists and colorectal surgeons; to talk with the fellows; see the computerised theatre scheduling system in action and to discuss limitations on residents' hours to 80/week.

Thursday December 11th

Thursday morning being free of scheduled appointments, I visited St Paul and saw the old library, theatre, dramatic arts centre, cathedral and the Minnesota State Capitol in an extremely cold and snow-covered city.

I was invited to the Riverside **Endoscopy Centre** at Fairview Riverside East for noon where I met Dr Ann Lowry, one of the Associates and the Residency Program Director. I was taken on a tour of the Endoscopy centre which is owned by CRSAL and is state of the art with very comfortable surroundings; carpeted, beautifully furnished with calming background music and well organised. Dr Lowry explained about the Colorectal Conference the following morning and about the colorectal residency programme.

I stayed on in the **Endoscopy Centre** to watch Dr Rothenberger perform two colonoscopies in the afternoon which was attended by one of the Colorectal Fellows and by a Family Medicine resident who wanted to learn about colonoscopies so that he would be able to explain the procedure to his patients.

I also visited again the **Center for Pelvic Floor Disorders** and joined Dr Anders Mellgren in his assessment of two patients; one with fistula in ano whose track was demonstrated on endoanal ultrasound after injection of hydrogen peroxide into the track and the other having his perianal haematoma drained under local anaesthetic. I also heard a **presentation** by LifeScan concerning 'Stand Up MRI' and consideration of its use to study pelvic floor pathophysiology and in particular a comparison of its findings with those of conventional evacuation defaecography.

Dr Mellgren invited me to join himself and his daughter for **dinner** in an Italian restaurant in St Pauls that evening before going on to attend an **Ice Hockey match** between the Toronto Maple Leafs and the local team the Minnesota Wilds at the Xcel Energy stadium in St Pauls. The stadium was packed, the support vociferous and good natured, and teams fairly evenly matched with a single goal separating the teams.

Friday December 12th

This morning started with the **Colorectal Conference** at the Business Office of CRSAL at 7am. This started with a presentation from Fujinon concerning their endoscopy equipment. There followed a clinico-pathological presentation of a patient of Dr Madoff's who had a mixture of juvenile, adenomatous and hamaratomatous polyps and that of the patient's sister who was found also to have colonic polyps and a colon cancer on screening. This was followed by a presentation on 'Serrated Colorectal Neoplasia-New Developments' by Dr Ken Batts, a pathologist from Abbott Northwestern Hospital. I then gave a **lecture** on 'Surgery for Short Bowel Syndrome' for 25 minutes followed by

a short time of questions and answers and discussion about the role of GLP-2 and growth hormone in promoting intestinal adaptation after major intestinal resection.

I then visited Abbott Northwestern Hospital to join Dr Madoff in the **operating room**. He was to carry out two cases: an abdominoperineal resection of the rectum for rectal cancer after pre-operative radiotherapy; and a laparoscopic right hemicolectomy for a large caecal polyp. It was particularly interesting to see the AP resection as it involved flipping the patient to a prone jack knife position to complete the rectal excision after initial mobilization and division of the rectum performed trans-abdominally.

During the afternoon, three of the colorectal associates were operating simultaneously in Abbott Northwestern – Dr Madoff doing the laparoscopic assisted right hemicolectomy, Dr Finne doing an exploratory laparotomy for small bowel obstruction due to a band adhesion and Dr Lowry carrying out a Hartmann's procedure for faecal peritonitis secondary to perforated sigmoid diverticular disease. It was a privilege to be able to visit all these operating theatres and see these operations as they progressed.

Visit to University of Nebraska Medical Center, Omaha, Nebraska:
13-18 December 2003

Aim of visit
To visit a centre specialising in surgery for short bowel syndrome, intestinal rehabilitation and intestinal transplantation due to my clinical interest in patients with intestinal failure

About the Center
The University of Nebraska Medical Center (UNMC) is a 687-bed facility and is part of the Nebraska Health System. It comprises the Clarkson Hospital (the first hospital in Nebraska), the University Hospital and the Lied Transplant Center and is located in West Omaha. The motto of UNMC is 'Serious medicine, extraordinary care'.

About the Host
Dr Jon Thompson is Schackleford-Marischal Professor of Surgery and Vice-Chairman of the Department of Surgery at UNMC. He is an international expert on the surgical management of short bowel syndrome.

Arrival
I travelled on Saturday afternoon from snowy Minneapolis to snowy Omaha where my host, Dr Thompson, had kindly organised for me to stay in the Lied Transplant Center which is attached to UNMC. This proved to be excellent advice as UNMC was located largely in a residential area some distance from downtown and from any hotels. The accommodation was superb and was designed to facilitate shared care of a patient between the nursing staff and the patient's relatives who looked after them in the room, with the patient going down to the nursing station for assessments, drugs and dressings.

The Visit

Sunday Dec 13th

I joined Dr Thompson and two of his residents at 8.30am to make **rounds** of the 15 patients he had under his care on several floors in the 2 hospitals. Of course the residents had already made their own preparatory rounds. It was extremely interesting and valuable to see this complex group of patients which included patients who had undergone restorative proctocolectomy, colon resection for carcinoma, surgery for morbid obesity and with short bowel syndrome. The ward round took two hours and was followed by a tour of the Department of Surgery, pre-admission area, the operating rooms, recovery and the Hospital Foyers.

That evening Dr Thompson and his wife took me out to **dinner** in downtown Omaha's Old Market which has a charming old-world atmosphere with antique shops, nice restaurants and horse-drawn carriages. We had a wonderful dinner in the V Mertz restaurant, run by a German family from Berlin, in the basement of one of the converted markets.

Monday Dec 14th

I joined Dr Thompson in the **Operating Room** for his list which included patients undergoing laparoscopic cholecystectomy, gastric bypass with prophylactic cholecystectomy for morbid obesity and re-do surgery for recurrent intra-abdominal abscesses related to retained exposed small bowel mucosa in a patient with short bowel syndrome. It was fascinating to see the system for ensuring that the correct patient and correct site were operated on both in the pre-admission area (where the operative incision site was marked and signed with the patient awake) and in the OR (where the operating surgeon and anaesthetist checked with each other who the patient was and what operation was to be done).

In the afternoon, I attended the **Intestinal Rehabilitation Meeting** where I met Dr John Dibiase, an adult gastroenterologist and director of intestinal rehabilitation programme, Dr Debra Sudan, a liver and small intestine transplant surgeon, Becky Wiseman, lead dietitian, Cindy Brown, nurse practitioner and other members of the team. This programme which included adults and children was started in 2000 and involves a multi-disciplinary assessment of patients with intestinal failure for intestinal rehabilitation, intestinal lengthening surgery or intestinal transplantation. Three new referrals were presented and discussed prior to them being seen or reviewed at the intestinal rehabilitation clinic the following day. A lap top and data projector was used to display patient history, relevant radiology and blood test results. All members of the team had an opportunity to contribute information relevant to area of expertise and specific topics was identified that need to be discussed with these patients the following day

In the evening, I went to an **Educational Session** for patients and their relatives about **bariatric surgery** run by Dr Corrigan McBride which was open to anyone interested in undergoing bariatric surgery and compulsory for those wanting to ahead with such

surgery. It was very interesting to hear the detail in which Dr McBride discussed the options for the patients describing the operative techniques, their expected results and the potential complications and mortality rate. After 45 minutes of a formal presentation, there was then an extensive question and answer session.

Tuesday Dec 16th

In the morning I was invited to join Dr Corrigan McBride, a general and bariatric surgeon for her **Operating List**. This list started at 7.30am and involved a laparoscopic gastric banding procedure for morbid obesity in the very nicely furnished minimally invasive operating suite with plasma screens, microphones, recording equipment and robotic equipment.

Following this operation I left to attend the **Intestinal Rehabilitation Clinic** in the Lied Transplant Centre with Dr Dibiase, Dr Gilroy (an Australian gastroenterologist and hepatologist) and the team of nurses, dietitians, psychologists and social worker. It was great to see the team in action and the organisation that had gone into coordinating the assessment of this patient. This patient had a series of interviews already set up with the dietitian, nurse coordinator, social worker, clinical psychologist and gastroenterologists. It was very interesting to discuss their decision making with respect to suitability for intestinal lengthening surgery or for small intestinal transplantation, and to discuss the results of isolated intestinal transplants and combined liver and small intestinal transplants.

In the afternoon I had an **interview** with Dr John Dibiase, director of Intestinal Rehabilitation Programme. We discussed their approach to assessment of patients with intestinal failure (160 patients over 3 years), their approach to intestinal rehabilitation with GLP-2, growth hormone, specialised diets, and his interest in the use of pacemakers for disorders of intestinal motility.

I then gave an **invited lecture** at Gastroenterology Conference on 'Probiotics for Inflammatory Bowel Disease – New Bugs for the Gut'. This talk was well received and led to a lively discussion on choice of probiotics and differing effectiveness of probiotics in ulcerative colitis and Crohn's disease

I was taken out to **dinner** at Dr Shaw's house in the Omaha suburbs with Dr and Mrs Shaw, Dr and Mrs Thompson, Dr McBride and Dr Oleynikov. Dr Byers Shaw is Merle M Musselman Professor of Surgery and is Chairman of the Department of Surgery at UNMC. Dr Shaw lives in a log cabin which is over a hundred years old and is classed as an Omaha Heritage home. This was a superb setting for a magnificent meal and fascinating conversation ranging from the frequency of obesity in NI versus USA, fast food industry in UK and USA, punishment shootings, female/male medical student entry and differences in surgical training and working hour legislation between UK and USA.

Wednesday Dec 17th

The day started with my **invited lecture** to the Surgery Grand Rounds on 'Surgery for Enterocutaneous Fistulae'.

I then had the privilege of joining Dr Thompson again for his all day **Operating List** which included a pre-peritoneal repair of a large ventral hernia in a patient who had undergone 20 previous laparotomies followed by a laparotomy, gastrostomy and Roux-en-Y pancreatic cyst-jejunostomy for a chronic pancreatic pseudocyst. It was interesting to see different retractors, instruments and types of mesh being used during these operations. The residents did the majority of the operating assisted by Dr Thompson and the other faculty members. During the day I was able to discuss with Dr Thompson his approach to choice of operations for short bowel syndrome and where the new operation of Serial Transverse EnteroPlasty (STEP) fits in.

In the evening I made **rounds** again with Dr Thompson and it was interesting to see the progress of patients and the attendance of the medical students and residents at the evening ward rounds.

Thursday Dec 18th

In the morning I was invited to join Dr Dimtri Oleynikov, a Russian-born American-trained and very skilled laparoscopic surgeon for two cases in the **Operating Room** – extraperitoneal laparoscopic repair of a inguinal hernia and laparoscopic biopsy of a large retroperitoneal mass. It was interesting to be able to talk to the Laparoscopic Fellows and residents during these cases.

After meeting again with my host Dr Thompson, I departed in the afternoon on the journey home from Omaha via Detroit and London to arrive in Belfast at lunchtime the following day.

Appendix: Talks Delivered on James IV Association of Surgeons Travelling Fellowship 2003

Date	Site	Audience	Title
Wed June 11 – Probiotics and IBD	Toronto	GI-General Surgery Rounds	New bugs for the Gut
Thurs June 12 Failure and Enterocutaneous Fistulae	Toronto	Colorectal Journal Club	Surgery for Intestinal
Mon June 16 barrier dysfunction and probiotics in IBD	Cleveland	Digestive Diseases Centre	Enteric bacteria, Gut
Mon June 16 Presentations, predictions and procedures	Cleveland	Dept of Colorectal Surgery	Intestinal Failure –
Wed Dec 3 Failure	Mayo Clinic	Dept of Colorectal Surgery	Surgery for Intestinal
Fri Dec 5	Mayo Clinic	Dept of Colorectal Surgery	Probiotics for IBD
Fri Dec 12 Failure	CRSAL	Colorectal Conference	Surgery for Intestinal
Tues Dec 16	UNMC	Gastroenterology Conference	Probiotics for IBD
Wed Dec 17 Enterocutaneous Fistulae	UNMC	Surgical Grand Rounds	Surgery for