

**ADVANCED TRAINING MODULE IN ADVANCED NUTRITION
INTESTINAL FAILURE AND INTESTINAL TRANSPLANTATION
OXFORD or SALFORD, with the potential to rotate between centres**

PRINCIPAL ACTIVITIES

This post is a full-time appointment by the Oxford University Hospitals NHS Trust or the Intestinal Failure Unit, Salford Royal Foundation Trust with the potential to rotate between the Centres. Great value is placed on experience at both centres, but both centres are open to discussion about how best to accommodate an appropriate candidate. It would be suitable as part of StR specialist training, or for a Specialist Registrar seeking Out of Programme Experience, assuming agreement with the relevant Deanery is obtained (this needs advance discussion with the Training Programme Director). The current post is designed to support the care of patients with intestinal failure and intestinal transplantation, consistent with the advanced nutrition training curriculum of the JRCPTB/SAC. Clinical activity in Oxford will be performed under the supervision of Professor SPL Travis, Professor of Clinical Gastroenterology and in Salford Royal by Professor Simon Lal, Lead Physician of Salford Intestinal Failure Unit (IFU). The timetable includes advanced training in nutrition, the management of intestinal failure and intestinal transplantation, as well as histopathology, radiology and teaching sessions. In Oxford, the successful applicant is expected to contribute to the cover rota, which includes emergency endoscopy; in Salford, the successful applicant will only have duties on the IFU on-call rota. It is expected that the successful applicant will contribute in both centres to departmental research and audit, under appropriate guidance.

GASTROENTEROLOGY SERVICE IN OXFORD

The Service is consultant led. Professor Travis has a major interest in inflammatory bowel disease and nutrition; A/Professor Keshav has a specialist interest in inflammatory bowel disease and the pathogenesis of inflammation, as does Dr Oliver Brain; Dr Collier runs the liver clinic; Dr Cobbold has a special interest in metabolic liver disease; Dr East runs the endoscopy service (19000 procedures/yr), supported by Dr Barbara Braden who has a special interest in endoscopic ultrasound and Dr Adam Bailey with an interest in upper Gastrointestinal disorders and neuroendocrine tumours. Dr Elizabeth Bird-Lieberman has a special interest in Barrett's oesophagus. Dr Phil Allan (appointed 2015) has a specialist interest in nutrition, intestinal failure and transplantation. Dr Rebecca Palmer (appointed 2016) has an interest in Young People with IBD and education. The service consists of gastroenterological medicine incorporating endoscopy, upper GI and colorectal surgery, parenteral nutrition and stoma therapy. Acute gastrointestinal disorders are managed jointly by specialist physicians and surgeons with common interests. The service is integrated with that at Horton General Hospital in Banbury. The Unit is expanding, with the extension of the Endoscopy Unit (2016), a research and Clinical Trials' Facility, together with further Consultant appointments in progress (2017). The clinical service is integrated with academic Gastroenterology in the Translational Gastroenterology Unit, lead by Professor Paul Klenerman, Sidney Truelove Professor of Gastroenterology (<http://www.expmedndm.ox.ac.uk/>), elected in 2015 to succeed Professor Fiona Powrie.

Five Honorary Consultants funded through the University, BRC and MRC (Professor Ellie Barnes, immunology of viral liver disease; Professor Alison Simmons, mucosal immunology; Associate Professor Holm Uhlig, mucosal immunology and Paediatric Gastroenterology; and Associate Professor Simon Leedham, molecular carcinogenesis) contribute to the service and academic structure. Professor Vipul Jairath has a special interest in Clinical Trials, based at the University of Western Ontario (Robarts); his honorary appointment is linked to Oxford, with a new rotating Trials' Fellowship between the two Centres (2017). Particular priority is placed on integration between the clinical service and research (below).

There are currently four gastroenterology StRs; one is attached to the Luminal side, two to the Hepatobiliary side and the fourth to General Nutrition. The fifth StR, the current post, is an

advanced training post in Nutrition, Intestinal Failure and Transplantation, suitable for a year 6 trainee, allied to the appointment of Phil Allan, the Consultant in Nutrition, Intestinal Failure and Transplant. The Gastroenterology StRs contribute to overnight cover for General Medical Take along with other specialties on a 1:28 commitment. The roles and ancillary duties of the individual StRs are explained in the local (288 page!) Gut Doctors' Guide. There is always Gastroenterology Specialist Registrar cover at the JR, with commitments currently shared with Senior Clinical Fellows (SCF). The six SCFs are experienced trainees, often attracted from abroad to complete advanced GI Training pending a Consultant appointment. SCFs are committed to six clinical sessions (outpatients and endoscopy) and four academic sessions each week, thereby providing first class service delivery and allowing time to support the clinical research of the department. Luminal and hepatology sides have one F2 and two CMT posts. The F2 posts spend 4-6 months in gastroenterology, as part of a two year rotation. At the Horton General Hospital (HGH), there are two Gastroenterologists (Dr Ellis and Dr Marshall) and two Gastroenterology StRs. The HGH consultants contribute to a general gastroenterology clinic, a hepatology clinic at the JR and to endoscopic training of StRs.

Great emphasis is placed on multidisciplinary care, with close cooperation between seven colorectal and three upper gastrointestinal surgeons, 3 HPB surgeons, gastrointestinal histopathology and radiology. Patients with inflammatory bowel disease or intestinal failure have joint management between surgical and medical teams. Two Gastroenterology Dietitians and a Gastroenterology Pharmacist are attached to the team. There is close liaison with Paediatric Gastroenterology, especially for adolescent IBD, transition and monogenic inflammatory bowel disorders.

Nutrition

The Trust has a long tradition in managing intestinal failure and home parenteral nutrition and, in 2008, the National Specialist Commissioning Group recommended Oxford as a centre for intestinal transplantation. This received Ministerial approval and represents collaboration with Cambridge for multiorgan transplantation, as well as the Intestinal Failure Units at St Mark's Hospital, London and Salford Royal, Salford.

The parenteral nutrition service was established in 1980 by Mr Mike Kettlewell, who also established the first Nurse-delivered Vascular Access service in the UK. The Parenteral Nutrition (PN) Team consists of four Clinical Nurse specialists, two PN dietitians, two PN Pharmacists, Biochemistry StR and Gastroenterology StR as part of General Nutrition training; the year 6 Advanced Nutrition StR is linked to this post. The PN team is currently responsible for 39 patients on HPN (Q2 2016) and a median 11 (range 7-21) patients daily in-hospital with PN. The needs of the patient dictate the principal location of care for intestinal failure, whether on the Colorectal Surgery ward (Churchill Hospital, eg for those with a laparostomy or multiple enterocutaneous fistulae), Gastroenterology ward (JRH, eg high output stoma or complex medical needs), or transplant ward (Churchill Hospital, eg transplant assessment and post-operative care). Professor Travis has been the lead clinician for Nutrition since 2001, joined by Dr Phil Allan (2015) as part of the Trust's strategic review of intestinal failure. To complement the PN team, there are two enteral-feeding Clinical Nurse Specialists and a Nurse-lead Vascular Access team. Three of the Consultant colorectal surgeons (Mr Bruce George, Mr Richard Guy and a surgeon in the process of being appointed) have a particular interest in the surgical management of intestinal failure.

Intestinal transplantation

The Intestinal Transplant team in Oxford is lead by Professor Peter Friend and Mr Srikanth Reddy, with a further surgical appointment to support intestinal transplantation in progress. The team have successfully performed 32 intestinal or modified multi-visceral transplants in Oxford since September 2008, with six patients currently in the assessment phase. The base for transplantation is at the Churchill Hospital (1mile from the John Radcliffe). There are close links to specialist gastrointestinal pathologists, radiologists and microbiologists. Part of the Advanced

Nutrition StR's role would be to join ward rounds and intestinal transplant clinics, to learn about immunosuppressive management. There is a monthly intestinal transplant MDT meeting to discuss referrals for transplantation and the StR would be expected to attend the quarterly meetings of the NASIT (National Adult Small Intestinal Transplantation) forum at which adults for transplantation are discussed before listing. SRFT IFU forms an integral part of the NASIT forum. Pre and post-transplant issues are discussed, and the forum is hosted quarterly at SRFT and in Oxford. The successful applicant will have the opportunity to be involved in the established transplant service and gain insight to its working pattern and structure, as well as gaining detailed knowledge of evaluating patients pre-intestinal transplantation.

Oxford Consultants

Name	Qualifications	Special Interest
Dr Phil Allan	DPhil MRCP	Nutrition, intestinal failure, transplant
Dr A Bailey	FRACP	Upper GI, endoscopy, neuroendocrine
Dr Oliver Brain	DPhil MRCP	IBD, Pathogenesis of inflammation
Dr B Braden	PhD MD	Endoscopy
Dr Jeremy Cobbold	PhD MRCP	Hepatobiliary, metabolic liver disease
Dr J Collier	MD FRCP	Hepatology
Dr J East	MD FRCP	Endoscopy
A/Professor S Keshav	DPhil FRCP	IBD, Pathogenesis of inflammation
Dr R Palmer	MRCP	Young people with IBD, education
Dr E Bird-Lieberman	PhD MRCP	Endoscopy-upper GI
Dr Nathan Atkinson (locum)	FRACP	Endoscopy
Dr Alissa Walsh (locum)	FRACP	IBD
Professor SPL Travis	DPhil FRCP	IBD, Nutrition
Honorary Consultants (University Staff)		
Professor A Simmons	DPhil, FRCP	Pathogenesis of IBD
Professor E Barnes	PhD, FRCP	Pathogenesis of viral liver disease
A/Professor H Uhlig	DPhil, MD	Mucosal immunology (paediatric)
A/Professor S Leedham	PhD, MRCP	Pathogenesis of neoplasia
A/Professor Vipul Jairath	DPhil MRCP	Clinical Trials

Junior

4 Specialist training Registrars in Gastroenterology

1 Senior Clinical Fellow in nutrition, intestinal failure and intestinal transplantation (this post)

6 Senior Clinical Fellows (Trust-funded, advanced trainees prior to Consultant appointment)

2 CMT, 1 F2 (including academic post)

8 or more Clinical Research Fellows

SALFORD ROYAL FOUNDATION TRUST INFORMATION

The Intestinal Failure Unit (IFU) at SRFT offers broad experience in all aspects relating to acute and chronic IF (Types 1, 2, & 3). Tertiary and quaternary patients referred from throughout the UK (and beyond), with all primary surgical and medical causes of IF, are cared for by a complete MDT within a purpose built, 21-bedded ward. The service also cares for more than 280 patients requiring long term home parenteral nutrition (HPN) across (and beyond) the UK. In addition, the IFU collaborates closely with the 2 national small bowel transplant centres (Oxford and Cambridge) to evaluate and manage patients before and following intestinal transplantation; the bi-monthly NASIT (National Small Intestinal Transplant) forum is hosted quarterly in Salford. The appointee will also gain unique experience in evaluating and managing patients undergoing intestinal lengthening procedures, since SRFT is the only UK institute to pioneer this exciting development for patients with type 3 IF.

In addition to its nationally-accredited IFU, a fully-complemented, consultant-led (Drs Peter Paine and Nadeem Sarwar), Nutrition Support Team (NST) manages patients with all nutritional needs throughout the Trust. The appointee will therefore gain general experience in managing patients with type 1 IF and those with complex enteral tube requirements. This service incorporates a daily ward-round and a weekly MDT, as well as a regular clinic primarily for patients with enteral tube needs.

SRFT has a large Gastroenterology Department; there are 14 consultant gastroenterologists with specialist interests spanning all aspects of Gastro-intestinal (GI) and hepatobiliary disease. The Trust is a regional tertiary referral centre for Upper GI, Colorectal and Bariatric Surgery, as well as for all aspects of luminal GI disease, including complex dysmotility. Patients with IBD are referred from throughout the UK, and abroad, and are managed in a multidisciplinary clinic. In addition, the Gastroenterology Department/IFU has an established academic history and a large GI science department with 3 professors of gastroenterology and 1 professor of colorectal surgery. The IFU and NST, in particular, also work in close collaboration with a renowned Quality Improvement (QI) Department at SRFT, striving to continually improve patient care utilising state-of-the-art methodology. The appointee will be encouraged to undertake research and/or QI projects leading to presentations at international meetings and publication. Previous appointees have managed to publish during their attachment at Salford.

Acute IF service

SRFT IFU manages patients with all medical and surgical causes of acute IF. The appointee will therefore gain unique experience in caring for the patients with the most complex nutritional requirements, encompassing all areas detailed within the advanced nutrition curriculum.

HPN service

SRFT has established a dedicated service for patients on Home Parenteral Nutrition over the last 3 decades. The service overviews all aspects of HPN care, from the decision making process to commencement of HPN, all aspects of vascular access placement and follow up after discharge. Patients are monitored regularly via clinic and video consults, according to their needs and underlying diagnoses. We treat patients from all over the UK and we have presently over 280 patients under our care. The appointee will gain experience in the management of complications and (where required) expertise in placing dedicated longterm lines; the appointee will also gain insight into how SRFT IFU has achieved the lowest sustained rates of central venous catheter infections worldwide.

AuGIR service

Adult patients in the UK with chronic intestinal failure usually receive home parenteral nutrition (HPN). The service employs surgical techniques for autologous intestinal reconstruction and lengthening (AuGIR), with the aim of allowing adult patients with established chronic intestinal failure to reduce their requirements of or become independent of HPN. The service is not an alternative to transplantation but aims instead to use established surgical techniques to increase intestinal surface area, in order to allow weaning from HPN, and apply these techniques to otherwise healthy adult patients with chronic intestinal failure, in order to return patients to enteral autonomy and obviate the need for HPN. Surgery involves restoration of continuity of excluded or previously bypassed segments of intestine, serial transverse enteroplasty and longitudinal lengthening and tapering (LILT), either alone or in combination, as well as reversed intestinal loops. The service has been established over the last 18 months and the successful candidate will have the opportunity to assess patients' suitability for these innovative procedures and manage and monitor them after surgery.

IFU team

Clinical Directors

Professor Simon Lal & Professor Gordon Carlson

Consultant Surgeons

Mr Iain Anderson, Mr Nick Lees, Mr Dominic Slade,

Associate Specialist	Mr Jonny Epstein, Mr Mattias Soop
Speciality Doctor	Miss Antje Teubner
Senior Surgical Fellow	Mr Arun Abraham
Registrars	ST7 or above, IBD and IF. Gastroenterology SpR to Dr Lal & IBD/IFU SpR (3 months/ year rotating with Royal Liverpool)
Clinical Psychologist	Dr Jo Abblett
Consultant Radiologists	Drs H Burnett, N Townsend, D Kasir, L Williams, S Ghattamaneni.
Clinical Biochemist	Dr D Derby
Lead Nurse	Anne Myers
Ward Manager	Jacqui Varden
Advanced Nurse Practitioners	Christine Hopkins & Amanda O'Brien
Principal Pharmacist	Gavin Leahy
Consultant Dietitian	Kirstine Farrer
Senior Dietitians	Chris Slater, Claire Forde
HPN Co-ordinator	Angela Page
IFU Secretary	Juanita McBride
QI Lead	Mike Taylor
Manchester University Research Lead	Dr Sorrel Burden (Senior Lecturer)

NST Team

Consultant Gastroenterologists	Drs Peter Paine & Nadeem Sarwar
Nutrition Nurses	Brenda Blackett, Helen Lloyd
Dietitian	Michelle King
Pharmacist	Gerda Garside
Biochemist	Dr D Derby

IBD Team

Consultant Gastroenterologists	Dr Andrew Robinson, Professor Simon Lal & Professor J McLaughlin, Dr A Conlin, Dr N Sarwar, Dr C Ormerod, Dr A Assadsangabi
IBD Nurses	Cath Stansfield, Grace Hamill & Cheryl Whittle.
IBD Dietitian	Michelle King.

Teaching and Training

Education of Gastroenterology junior medical staff is carried out through two gastroenterology teaching sessions each week, together with regional StR teaching each week. There is a weekly joint postgraduate teaching session held between physicians and surgeons, a journal club, separate luminal and liver histopathology and two x-ray sessions each week. In Oxford there is a joint meeting between the clinical and academic members of the Translational Gastroenterology Unit and the Dunn School of Pathology each month. Gastroenterology undertakes training of first and third year clinical medical students, as well as medical students from overseas. These activities specifically include tutorials, teaching ward rounds and seminar sessions as well as less formal ward and outpatient based teaching. In Salford, there is a fortnightly research/journal club meeting between the clinical and academic IF team aimed at reviewing research protocols and data, as well as discussing recent published literature.

With regard to the Advanced Nutrition curriculum, tutorials with appropriate specialists (physicians, surgeons, radiologists, pathologists, physiologists, dietitians, clinical nurse specialists, vascular access specialists, pharmacists and managers) will be programmed around a Thursday afternoon in place of the regional teaching, to cover nutritional physiology, the

determination of nutritional and fluid requirements, indications for enteral and parenteral nutrition and those for intestinal transplantation, characterisation of intestinal failure, determining the anatomy, the timing of decision-making, the management of complex inflammatory bowel disease and planning and co-ordination of HPN and transplantation. This will be augmented by experiential exposure through clinical practice under the supervision of Consultants and nominated colleagues. Methods of assessment will include DOPS, CbD, miniCEX, SCE and MSF, as indicated in the BSG Advanced Nutrition Curriculum.

Research

The Oxford Translational Gastroenterology Unit is acknowledged as one of the premier units for gastroenterological research in Europe, especially in mucosal immunology. New laboratories opened at the John Radcliffe Hospital in 2010, adjacent to the clinical ward and offices. In 2016 Oxford successfully renewed its status as one of five Biomedical Research Centres, with mucosal immunology as a core theme. Professor Paul Klenerman (Sidney Truelove Professor of Gastroenterology, 2015) is internationally renowned for work on T-cell immunology and host-pathogen responses. Professor Fiona Powrie FRS is internationally acclaimed for her work on mucosal immunology and murine models of inflammatory bowel disease, supported by A/Professor Holm Uhlig (Senior Lecturer in Gastroenterology and Honorary Consultant Paediatric Gastroenterologist). Close links are maintained with the Dunn School of Pathology (Professor Kevin Maloy), MRC Human Immunology Unit at the Weatherall Institute of Molecular Medicine (Prof Sir Andrew McMichael and Prof Alison Simmons), the Peter Medawar Building for Pathogen Research (Director: Professor Paul Klenerman and Professor Ellie Barnes) and Molecular Carcinogenesis (Professor Ian Tomlinson and A/Professor Simon Leedham). The opportunity for research will depend on the interests of the individual, but all StRs and SCFs are encouraged to undertake a project. Collaborative research on the role of lymphatic endothelial expression and transplantation is underway, but there is ample opportunity in clinical and translational areas of research with regard to nutrition, intestinal failure and transplantation.

SRFT IFU has a renowned academic history; there are 3 professors of gastroenterology and 1 professor of surgery based at Salford Royal with academic appointments at the University of Manchester. The Gastro-Intestinal group promotes a highly interdisciplinary approach to its research with extensive collaborations with mucosal immunology, neuroscience (brain imaging), aging, genomics, endocrinology, and psychology. The molecular / cellular group works in the multidisciplinary bioscience facilities in Manchester, where their research is integrated fully into generic life science-based laboratories including the Wellcome Trust Cell Matrix Unit and Manchester's Integrated Bioscience Centre, for translational and genomic research. The clinical researchers are housed in purpose-built facilities located at base hospital sites and in the Wellcome Trust Clinical Research Facility. Opportunities exist within the following areas:

- Molecular / Cellular physiology in health and disease. This section is led by Professor John McLaughlin and covers epithelial cell responses to luminal nutrients in health and inflammatory disease and mucosal immunology.
- The human brain-gut axis in health and disease. This section is led by Professors Shaheen Hamdy and Peter Whorwell. Research is focused on mechanisms of human visceral pain and cortical control of gut function, including continence and dysphagia mechanisms.
- Clinical nutrition. This is led by Professors John McLaughlin and Simon Lal looking at intestinal failure, sarcopaenia and nutrient human gut-brain signaling.

The appointee will be encouraged to undertake specific research projects; previous appointees have published retrospective case series, enrolled in Cochrane Systematic Reviews and generated pilot data leading to successful application for higher degree (MD/PhD) funding. The IFU and NST, in particular, also work in close collaboration with a renowned Quality Improvement (QI) Department at SRFT, and the successful appointee will be offered the opportunity in engaging in this work and learning state-of-the-art QI methodology; this has led to publications for previous appointees.

Oxford Weekly programme

	am	lunchtime	pm
Mon	Multidisciplinary PN Ward Round (JRH)	Monthly Intestinal Transplant MDT	Endoscopy (JRH)
Tue	Transplant ward round/ward referrals (Churchill)	12.15 Luminal Xray meeting	General gastroenterology Outpatients/Transplant Clinic alternate weeks
Wed	Administration		Consultant Nutrition Round, Churchill Hospital
Thu	Multidisciplinary PN Ward Round and IF ward referrals (Churchill)	11.15 Student teaching 12.15 SHO presentation 1pm Grand Round	2.15 Specialist tutorial 3.30 Liver histology 4pm Luminal histology 4.30 Clinical meeting (JRH)
Fri	Journal Club (Cons dining room) Nutrition clinic (JRH)	12.30 IBD MDT meeting	Inflammatory Bowel Disease Outpatients (JRH)

On call: contributing to the StR on call rota (1:8), non-residential.

This programme is for illustrative purposes only, since commitments and site will vary according to the timing of intestinal transplant assessments and surgery. JRH: John Radcliffe Hospital

SRFT Weekly programme

	Monday	Tuesday	Wednesday	Thursday	Friday
0800-0900	IFU PN Review	IFU PN Review	IFU PN Review	IFU PN Review	NST MDT
0900-1230	IFU W/R	IFU GRAND ROUND & MDT	NST W/R	IBD Clinic	0900-1100: IFU Consultant W/R 1100-1230: Quality Improvement
1230-1330	GI Surgical/Medical MDT	Gastro MDT or IFU XR MDT	Journal Club	Histology or IBD MDT	IFU Research Meeting
1330-1700	Admin	HPN Clinic	Research/QI	Endoscopy	Admin/Research

On call: IFU on call rota (1:5) non-residential and no commitment to general internal medicine. This programme is for illustrative purposes only.

18.6.13; updated 2.10.14; updated 15.9.15; updated 8.10.16
SPLT, SL

RECRUITMENT TO MEDICAL & DENTAL POSTS - PERSON SPECIFICATION SELECTION CRITERIA

Post: Senior Clinical Fellow n Nutrition, Intestinal Failure and Transplantation

S1/.../SER/Date

Requirements	Essential	Desirable
Qualifications/Training		
(a) What professional qualifications are needed?	MRCP or equivalent	Higher degree
(b) What general professional training is needed?	Completion of General Professional Training <u>and</u> at least 4 years as Specialist training Registrar in Gastroenterology	
Experience		
(a) What work experience is needed?	Trained in clinical gastroenterology, diagnostic and therapeutic endoscopy	Additional qualification in Nutrition and experience in managing intestinal failure
(b) What length of experience is needed?	At least 4 years as Registrar in Gastroenterology.	Research experience
(c) What level of responsibility should be shown now?	Able to make independent management decisions, supported by consultant staff	
Skills and Knowledge - What special skills or knowledge does the postholder require, eg		
(a) Leadership skills	Sufficient leadership, organisational, communication, professional and personal skills to undertake effectively the role of a Year 6 Training Fellow (Senior Registrar equivalent) in a large teaching hospital	Knowledge of the organisation of the NHS and the Government's agenda for modernisation.
(b) Organisation skills		
(c) Professional - extra skills or achievements		
(d) Personal skills	Good personal and interpersonal skills	Computing skills: ability to use word processor, spreadsheet programme and web browser..
(e) Communication skills	Good spoken and written English. Communication skills should be highly developed.	Management training and experience
(f) Teaching experience	Experience of teaching undergraduates and trainees	
(g) Audit experience	Experience of clinical audit	
Other Requirements		
(a) GMC Registration	Full GMC Registration	First author publications and presentation at international meetings
(b) Research experience		

Out of Programme Experience (OOPE)

If a trainee with a UK Gastroenterology NTN wants to take Out of Programme Experience, this must be discussed at an early stage with the Training Programme Director.

In brief, if the trainee does not want this time on OOPE to count towards their CCT, the Dean or deputy will usually sign off and a copy sent to the trainee and the Programme Manager for their records.

However should the trainee require this time on OOPE to count **they must** obtain a College letter of support to accompany the OOPE request and assorted paperwork in order for the deanery to make an application on the trainee's behalf for approval from the GMC. Individuals cannot make the application to the GMC for approval.

Some Colleges (including the JRCPTB) however like the deanery to have signed off the OOPE form before they will issue a letter of support and in these cases a “Provisionally” signed approval form is sent by the deanery to the trainee to enable them to obtain the College letter of support.