

Introduction

The fellowship programme is run through the Joint Committee on Surgical Training (JCST).

Fellowship posts are open to all higher surgical and where appropriate, non-surgical trainees, that meet the person specifications. Details of eligibility are found through the <u>JCST</u>.

Any unit applying to host Training Interface Group fellows must have trainer representation from all parent specialties.

Applicant units are required to be able to deliver the TIG curriculum and adhere to the quality indicators (QIs). The curriculum can be found on the <u>ISCP</u> website in the curricula of the most relevant parent Specialties (as mentioned above) and the QIs are listed on the <u>JCST website</u>.

The data included in the form below is an extract of the data submitted by the unit in their application to become a TIG unit.

Unit Lead Trainers:

Names

Ms Victoria Giblin & Mr Jonathan McGregor-Riley

Local Educational Provider (LEP)

Main hospitals/trusts involved with teaching (base units): Northern General Hospital, and Royal Hallamshire Hospitals of Sheffield Teaching Hospitals (STH) and Sheffield Children's Hospital

	Hospital/Trust A	Hospital/Trust A	Hospital/Trust C
Name of Trust	Northern General Hospital	Royal Hallamshire Hospital	Sheffield Children's Hospital
Address of Trust	Herries Road, Sheffield. S5 7AU	Glossop Road, Sheffield. S10 2JF	Western Bank, Sheffield. S10 2TH

LEP Consultants / Trainers

Primary Educational Supervisor (may be a trainer): Ms Giblin, Mr Mcgregor-Riley or, in discussion with Fellow and the training team, an Educational Supervisor from the Main trainer list below, associated with original training specialty.

Main Trainer(s) involved with fellowship:

A main trainer must undertake more than five programmed activities (PA) in their job plan and they must also be a surgeon primarily in the relevant subspecialty area and recognised by the GMC as a trainer. At least one trainer from each specialty must have five years full time experience in the NHS.

List of parent Specialties of main trainers:

Parent Specialty	Number of main trainers from this Specialty	Major trauma Consultant (total 18 at STH)
Plastic Surgery	5	
Orthopaedics	3	3
OMFS	1	
General Surgery	3	
Vascular Surgery	2	
Thoracic Surgery	1	1
Neurosurgery	2	
IR	1	
Paediatric Surgery	2 (Trust B)	

Other Trainer(s) involved with fellowship:

Parent Specialty	Number of other trainers from this Specialty	Major Trauma Consultant (total 18 at STH)
Emergency med, pre hospital	1	1
care, major trauma Lead		
Anaesthetic & Pre Hospital	1	1
Care, STH, MT education and		
clinical governance Lead		
Neuroanaesthesia, major	1	1
trauma consultant service		
development lead		
Plastics	7	
Orthopaedics	5	1
Pain Management	1	
OMFS	5	
General Surgery	2	
(Cardio)thoracic	5	
Paediatric Trauma and Ortho	6 (Trust B)	
Paediatric Surgery	4 (Trust B)	

Paediatric Neurosurgery (sp complex spine)	1 (Trust B)	
IR+ MSK radiol trauma lead	3	
Neurophysiology	1	
Specialist (limb fitting)	1	
rehabilitation		
Orthogeriatrics	1	

Any other Specialties who are members of the multidisciplinary team not already mentioned as appropriate to the TIG:

Specialty	Trust A (numbers)
Major Trauma Rehabilitation	1
Major Trauma Lead Therapist	1
Lead Trauma Nurse Coordinator	1
Hand Therapy	3
Specialist Trauma Occupational	2
Therapy	
Lower limb reconstruction CNS	1
Research nurse	1
Vascular CNS	2
Trauma psychology	1
Neurosurgery	16
Neuroanaesthetics	12
Neuro nursing and PAM staff	
(neurotrauma, neurocritical care)	

Indicative Timetable

The fellow should be based at the main hospitals/Trusts for most of their educational activity but one session (professional activity) may occur outside these units each week. A trainee may work for 48 hours per week and if there is no on-call, all this time may be used for training.

Below is an indicative timetable that indicates the type of proposed activity and includes supporting professional development (SPD) as is compatible with the Quality Indicators specific to this TIG. (All Quality Indicators online at: <u>https://www.jcst.org/training-interface-groups/quality-processes/</u>)

Sheffield offers a plethora of useful learning opportunities in resuscitative surgeries, governance and coordination of team members and depending on which home specialty the fellow comes from and what they want to get from the fellowship (to be discussed and guided on a weekly basis by their supervisor through reflective sessions) the timetable will vary somewhat. A general skeleton timetable will be prepared for the fellow including competency targeted areas. This will be developed from the individual timetables from every specialty during MDT TIG group consultant meeting prior to arrival of a fellow, and tailored to the general requirements and specialty of that individual. We expect that someone training towards the role of Major Trauma Consultant should be proactive and demonstrate ability to coordinate and plan so that (with the help of their supervisor) they can make best use of facilities, make contact with on call personnel to be notified about trauma at the Children's hospital, for example. Each specialty has excellent training facilities, teaching ward rounds, MDTs, regional teaching, Journal Clubs etc in which the fellow can participate in addition to a weekly meeting with their supervisor for reflection and progress.

Types of activity

Combined outpatient clinic (COC) Other outpatient clinics (OOC) Operating theatre (Th) Multi-disciplinary team meeting (MDT) Supporting Professional Development (SPD) Teaching ward round (WR) Research activities (RA)

All Fellows will be expected to attend and eventually run the Major Trauma MDT and ward round, coordinate with specialties and follow relevant cases through to theatre, IR etc.

Trust A	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning	Major Trauma MDT and WR Trauma theatre	Major Trauma MDT and WR	Sat trauma lists in all specialties				
Afternoon			SPD/research	MT governance Orthoplastic combined LL clinic	SPD/research		
Evening	Be on the on call notification calls for pertinent cases	NB there is no formal on call commitment but in this fellowship, attendance for some cases will definitely be beneficial. Formal on calls could be remunerated.					

There are many research opportunities available linked to Major Trauma and interests and potential projects will be discussed with supervisors.

Below, please find skeleton timetables from the other specialties which would be combined to create the tailored timetable.

Ortho Trust A	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning	Major Trauma	Major Trauma	Major Trauma	Major Trauma	Major Trauma		
	Team Ward Round	Team Ward Round	Team Ward Round	Team Ward Round	Team Ward Round		
	Trauma theatre	Spine Trauma	Trauma Theatre	Limb Recon MDT			
		outpatient clinic		and Teaching WR			
Afternoon	Trauma Theatre or	Trauma Theatre or	Fracture Clinic	Limb Recon OPD	Limb Recon		
	Limb Recon List	Limb Recon List	(General Trauma &	Limb Recon/Plastic	Radiology MDT		
		Or	P&A follow-up	Surgery COC (6	Research time		
		Fracture Clinic		weekly)			
Evening				MTC M&M			
				meeting (monthly)			
Plastics Trust A	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning	Trauma	Trauma	Trauma	Trauma	Trauma	Consultant led	
	Conference/MDT	Conference/MDT	Conference/MDT	Conference/MDT	Conference/MDT	trauma list	
	Teaching WR	Teaching WR	Teaching WR	Teaching WR	Teaching WR		
	Elective Th (A) or	Elective theatre	Elective lower limb	Trauma clinic	Elective theatre		
	Trauma Clinic	(A), Trauma (B) or	recon	Orthoplastic Limb	(A) WR <i>,</i> Trauma		
	(OOC)	Trauma clinic	theatre/clinic	Recon MDT	clinic (OOC)		
		(OOC)	(OOC/COC or		Plexus clinic (COC)		
			trauma clinic				
Afternoon	Plastics Trauma	Burns MDT Plastics	Plastics Trauma	Limb Recon OPD	Limb Recon		
	Theatre (A) and (B)	Trauma Theatre	Theatre (A) and (B)	Limb Recon/Plastic	Radiology MDT		
		(A) and (B) and		Surgery COC (6			
		burns theatre.	SPD/Research	weekly)	Governance M and		
					M Plastics (1st)		
		(Burns MDT Trust			Complex hand		
		B also)			MDT (3rd)		
					Trauma or burns		
					theatre		

			SPD/Research	
Evening		Journal Club 4-6		
		weekly		

Please Note: Morning and afternoon orthopaedic trauma and plastics theatre lists are used for open fracture cases and the Fellow should liaise with the trauma coordinators to keep abreast of these cases if wishing to attend.

OrthoPlastic Hands (Trust A and B) The Indicative Timetable for our Hand TIG is included here as it dovetails with Plastic timetable and has many useful trauma components. It was developed in 3 parts to change through the year. Any MT TIG would be most welcome to be involved in an area of interest not taken up by the Hand fellow at that time.

Feb-Apr	Monday	Tuesday	Wednesday	Thursday	Friday
Morning	Elective Theatre (Th A)	Children's Theatre (Th B)	Elective Theatre (Th A)	Elective Theatre (Th A)	Trauma Clinic (OOC A) or
					Plexus clinic (COC A)
Afternoon	Hand Clinic (OOC A)	Children's clinic (OOC B) or Paed	Trauma Theatre (Th A)	Trauma Theatre (Th A)	See Below (SPD)
		Burns MDT			
May-Jul	Monday	Tuesday	Wednesday	Thursday	Friday
Morning	Hand Clinic (OOC A)	Children's Theatre (Th B)	Elective Theatre (Th A)	Elective Theatre (Th A)	Elective Theatre (Th A) or
					Plexus clinic (COC A)
Afternoon	Trauma Theatre (Th A)	Children's clinic (OOC B) or Paed	Hand Clinic (OOC A)	Hand Clinic (OOC A)	See Below (SPD)
		Burns MDT			
Aug-Oct	Monday	Tuesday	Wednesday	Thursday	Friday
Morning	Trauma Theatre (Th A)	Elective Theatre (Th A)	Elective Theatre (Th A)	Trauma Clinic (OOC A)	Hand Clinic (OOC A) or Plexus
					clinic (COC A)
Afternoon	Trauma Theatre (Th A)	Trauma Theatre (Th A) or Burns	Hand Clinic (OOC A)	Trauma Theatre (Th A)	See Below (SPD)
		MDT/Theatre (Th A)			
Nov-Jan	Monday	Tuesday	Wednesday	Thursday	Friday

Morning Elective Theatre (Th A) or		Elective Theatre (Th	ective Theatre (Th A)		Clinic (OOC A) or Trauma	Hand Clinic (OOC	Hand Clinic (OOC A)		Elective Theatre (Th A) or	
	Trau	ma Clinic (OOC A)			Clinic (OOC A)				Plexus	clinic (COC A)
Afternoon	Trau	ma Clinic (OOC A)	Hand Clinic (OOC A) or Burns	Traum	a Theatre (Th A)	Trauma Theatre (1	「h A)	See Bel	ow (SPD)
	-	MDT/Theatre (Th A)							
Trust A ON	1FS	Monday	Tuesday	Wednesday		Thursday	Friday	Saturday		Sunday
Morning		Maxfax Trauma clinic (OOC)				Acute All day trauma recon theatre cases				
Afternoon			Max Fax Trauma theatre			Acute All day trauma recon theatre cases	Max Fax Trauma Theatre			
Evening		Be on the on call notification calls for pertinent cases	Be on the on call notification calls for pertinent cases	Be on the on notification of for pertinent	calls	Acute All day trauma recon theatre cases	Be on the on call notification calls for pertinent cases			

Additionally monthly joint orbital trauma clinic with ophthalmology for complex orbital trauma.

Access is available on the RHH Emergency list out of hours and afternoons for "urgent, treat now" cases as per Sheffield Maxillofacial Trauma Protocol. If required cases are also accommodated on OMFS elective lists depending on utilisation and capacity.

Paediatric Maxillofacial Trauma & Emergencies from Barnsley and any child under 2y are transferred to Sheffield Children's Hospital and operated their Emergency List (Trust B) OFMS enjoys Collaborative working with Neurosurgery, plastics, ENT and ophthamology. High cases load of post traumatic facial deformity correction with osteotomy or more recently camouflage with facial patient specific implants and 3D Planning of complex cases and Navigation assisted surgery for the cases that require it.

Trust A	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
NeuroSurgery							
Morning	MDT	MDT	MDT	MDT	MDT		
	neurorad/neuroSx.	neurorad/neuroSx	neurorad/neuroSx	neurorad/neuroSx	neurorad/neuroSx		
	Neuro Emergency	Neuro Emergency	Neuro Emergency	Neuro Emergency	Neuro Emergency		
	Theatre	Theatre	Theatre	Theatre	Theatre		
	000	000	000	000	000		
Afternoon	Neuro Emergency	Neuro Emergency	Neuro Emergency	Neuro Emergency	Neuro Emergency		
	Theatre	Theatre	Theatre	Theatre	Theatre Elective		

	Elective lists	Elective lists	Elective lists	Elective lists	lists	
Evening						

All cases from the previous 24 hours are discussed followed by a combined ward round discussing the management of all neurocritical care patients – many of whom are neurotrauma patients. The management of all these patients are similar or have relevance to the management of neurotrauma patients. The on call neurosurgeon runs an emergency list every day dealing with trauma, hydrocephalus, spinal disorders and oncology. Whilst not all the cases are dealing with neurotrauma the surgical principles are similar with transferrable skills and knowledge. There are 2-3 other elective neurosurgical lists every weekday. These predominantly cover oncology and spinal patients. The basic surgical procedures are similar to the approach for trauma patients and again provide transferrable skills and knowledge. The department runs out-patient clinics every day that can be attended. There is a mix of new and follow up, urgent and elective patients with spinal and cranial disorders. Mr Ivanov provides a spinal trauma service at the MTC as well as performing complex spinal procedures at our main site. The latter operations provide similar techniques and skills required for the management of spinal trauma patients. There are research opportunities available.

Trust A Vascular	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning	Vascular and IR	Artery theatres	Vascular and IR		MDT and Teaching		
	COC		COC		WR		
	Artery Theatres				Artery theatres		
Afternoon	Consultant WR	Artery theatres	Consultant WR		Grand round 1pm		
	Artery theatres				Gen and Vasc Sx		
Evening							

Theatre 18, emergency theatre or a second emergency theatre is used or opened for vascular trauma and emergencies. 2320 cases/y, 392 emergency many useful to TIG fellow.

Trust A General	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning	Teaching WR	Theatres and OOC	Consultant WR	Theatres and OOC	Consultant WR		
	Theatres and OOC		Theatres and OOC		Theatres and OOC		
Afternoon	Theatres and OOC	Theatres and OOC	Theatres and OOC	Theatres and OOC	Grand round 1pm		
					Gen and Vasc Sx		
					Theatres and OOC		
Evening							

Theatre 18, emergency theatre or a second emergency theatre is used or opened for general surgical trauma and emergencies. Journal Club every 6 weeks.

Trust A	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Cardiothoracics							
Morning	Consultant WR						

	Theatres Thoracic and cardiac + ECHO scanning					
	000	and OOC	and OOC	and OOC	and OOC	
Afternoon	Theatres Thoracic					
	and cardiac +					
	ECHO scanning					
	and OOC					
Evening						

200 Thoracotomies per annum (850 thoracic procedures) so theatres very valuable for techniques and anatomy even when elective. Cardiac theatres also very valuable. All lists have ECHO scanning which would be a useful tool to experience for trauma. Ad hoc clinic slots created specifically within one of the clinics available so the fellow to see trauma follow ups on the same day. Mr Edwards preparing National rib fixation trial with ScHARR.

Trust A Intervention Radiology

IR offers the minimum syllabus requirement (10 trauma IR cases – mainly observational capacity) without concern. Anything more than this would depend on training capacity for the IR trainees.

The IR trauma cases happen on an ad hoc basis and the trauma fellows would need to make themselves available out of hours and be proactive.

Trust B

Ortho Trust B	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning	8.00am Ward				8.00am Ward		
	Round all T&O				round		
	inpatients				8.30 XR Meeting		
					9.30 Trauma list		
Afternoon	12.00h Weekly		Trauma list in		12.00h Planning		
	MDT case review		theatre		meeting for		
	of all current				following week		
	paediatric major				elective and		
	trauma inpatients				trauma		
	2.00pm -5pm				reconstruction		
	Fracture Clinic /				operative cases		
	alternating				1.00-2.00pm Alt		
	Trauma				weeks – Journal		
	reconstruction				Club		
	operating list						
Evening							

Paed Sx Trust B	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning	Research	SPR Journal Club	Out Patient Clinic	Operating List	Grand Rounds		
		Grand Rounds			Radiology MDT		
		Radiology MDT			Oncology MDT		
Afternoon	Trauma MDT	SPR Teaching	Audit	Operating List	Out Patient Clinic		
		Microbiology MDT					
Evening							

Neurosurgery Trust B:

The neurosurgical department also has a paediatric unit at Sheffield Children's Hospital (dedicated Paeds MTC). Any interested trainee can join the paediatric neurosurgical team to gain exposure to paediatric neurosurgical procedures.

Training Delivery

Please an overview of the Unit's TIG Fellowship Training Delivery plan:

Sheffield MTC sees and treats the full range of trauma patients successfully with very cohesive teams. The recent development of the formal Major Trauma Consultant post, commencing in 2018, will be actively evolving and developing. The fellow will be in the perfect position to be exposed to all requirements for the *Resuscitative Surgeon* Post as well as the **Major Trauma Consultant** post, while being involved in service development with the opportunity for audits and research in a way that will be required as a consultant.

Our fellowship will be closely supervised weekly with reflective processes involved but with significant input expected from the fellow into the planning of their timetable, contacting provided links, in a manner useful to a future coordinator. This has been agreed by all trainers detailed on the application.

Trainers engaged in the TIG are expert in the surgery that is required to provide and lead the immediate care needed by severely injured patients manage unstable life threatening trauma and guide the fellow in selecting patients for operative, interventional radiological or conservative treatment and to provide ongoing care for all three groups. We do more than sufficient cases and have enough 'space' in our current trainee numbers to accommodate a fellow.

Our teams routinely carry out stabilisation surgery and can ensure, as they do with their current trainees, that the fellows reach competencies in all areas highlighted to be able to practice independently including burns and plastics, vascular, cardiothoracics, general surgery, neurosurgery, maxillofacial surgery, orthopaedics, and interventional radiology in adults and children.

The trainers here are familiar with competence based syllabus and plan to deliver this in conjunction with wider training for both types of fellow.

Similarly, and perhaps even more so, the Sheffield team are well prepared to train a fellow to be a coordinating Major Trauma consultant with our excellent wider Major Trauma MDT who already actively take patients from arrival all the way through to rehabilitation in a coordinated, joined up manner. The fellow will be able to be involved in all the important steps along the way, including the MDTs, governance meetings, MAJAX planning meetings, coordinators.

By the end of 12 months we expect them to be able to lead the Major Trauma MDT, understand how to coordinate and implement stabilisation having been involved in the process at increasing level over the months. To develop a cohesive treatment plan, understanding all those required to be involved in reaching that stage. It goes without saying that our teams will work through competencies, reflective learning and courses to develop the ability to provide

day to day care for trauma patients. In conjunction with our rehabilitation consultant lead and physio they should also develop skills in planning discharge arrangements and ongoing rehabilitation.

The involved specialties will certainly be able to provide guidance and relevant teaching on the b) The impact on and management principles of trauma to

a. CNS and PNS (Neurosurgery, spinal specialist unit)

c. The musculoskeletal system (orthoplastics)

d. The pelvis (ortho, general surgery, urology, gynae)

e. The urinary system

f. Soft tissue (plastics)

- g. The face, head and neck (including the eyes) (Max fax, occuloplastics)
- h. The thorax and its contents (cardiothoracics)
- i. The abdomen and its contents (general surgeons)
- j. The peripheral vascular system (vascular)
- c) Care of the elderly trauma patient (orthogeriatricians)
- d) Care of vulnerable people who have suffered trauma (safeguarding team, therapists)
- e) Management of common complications (Combined)

f) Trauma system management (See the systems developed and developing here - a wonderful opportunity to be involved and learn)

Although we have collected details from the required specialties for the application, our MTC has many other resources to tap into that may also be useful and other specialties who would be happy to offer assistance in particular areas of interest.

In summary, Sheffield MTC is excellently positioned to offer both Major Trauma fellowships. We have an excellent collaborative clinical body who is very excited to take this forward with an engaged and proactive Fellow. We are also evolving the Major Trauma Service and it will be invaluable for a fellow to be part of the process.