

London School of Anaesthesia
South London Anaesthetic Programme

Stage 3 Special Interest Areas

August 2027 & February 2028

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Application Process for Special Interest Area Posts

The South London Anaesthetic Programme offers 42 special interest area (SIA) posts in 14 specialty areas across 8 different hospitals/trusts. All residents within South London can apply to undertake any of these SIA posts during their Stage 3 (ST6/7) years.

Please read the following guidance carefully on the application and allocation process for posts commencing in August 2027, November 2027 and February 2028.

- Residents can apply to undertake a maximum of 12 months (whole time equivalent) in SIA posts during their Stage 3 (ST6/7) years, as required by the curriculum.
- **Applications are open to all residents who will have completed Stage 2 training and will be ST6/7 (Stage 3) by the time of commencing the SIA post.**
 - This is of particular relevance to LTFT residents or those with interrupted training timelines, who should discuss their timelines with their TPDs to ensure that they apply for SIA posts commencing at the appropriate time.
 - It is also of relevance to any resident who commenced Higher training in February (rather than August) and will therefore enter Stage 3 in February 2028. They are also eligible to apply in this round for SIA posts commencing in February 2028.
- Residents can apply for a maximum of **two SIAs**: either two different specialties of 6 months duration each (whole time equivalent) or one specialty of 12 months duration (whole time equivalent).
 - Single specialty 12 month SIAs are available in Anaesthesia for Cardiac Surgery, Anaesthesia for Neurosurgery, Obstetric Anaesthesia and Paediatric Anaesthesia.
 - Residents who wish to undertake 12 months of Cardiac or Obstetric Anaesthesia are strongly advised to apply for two 6 month SIAs in these specialties at two different sites, to give a diversity of experience.
 - Paediatric Anaesthesia 12 month SIA posts are only available at GOSH but residents can also apply for two 6 month SIAs in Paediatric Anaesthesia at two different sites if they wish to.
 - 12 month SIAs in Anaesthesia for Neurosurgery are available as either all 12 months at Kings College Hospital or a combination of 6 months at St George's Hospital & 6 months at NHNN, Queen Square.
- Residents must complete and submit an **online application form** to apply for the SIA posts.
 - If applying for TWO 6 month SIAs, you will need to state which is your 1st and 2nd preference.
 - If applying for only ONE SIA, you can still apply for two different SIAs (indicating which is your 1st and 2nd preference) in order to maximise your chances of success.
 - For each SIA, you can then rank your preference for the sites at which the SIA is offered and omit those you do not want to be considered for.
 - The link to the online application form will be available on the London School of Anaesthesia website in September 2026.

- Applications will be assessed and scored on two components:
 - A supporting personal statement for **each** SIA applied for, demonstrating why the resident wishes to do that particular SIA and their commitment to that specialty [maximum of 200 words) / maximum score of 20].
 - Three supporting information statements for **each** SIA applied for, describing the residents involvement in: (i) Teaching / Training, (ii) QI / Research, (iii) Management / Leadership [maximum of 150 words for each response / maximum score of 10 for each].
- Applications will be scored anonymously by the respective SIA module leads using a standardised scoring matrix. The scoring matrix that will be used for each SIA is published in the Appendix at the end of this handbook.

Please be aware of the following conditions that apply once you have been offered and confirmed acceptance of an SIA post:

- A minimum notice period of **6 months** from the start date of the SIA is required if you subsequently want to make changes or no longer wish to undertake the post i.e. by the end of January for August start date / by the end of July for February start date.
- If a post is accepted as LTFT then it may not be possible to subsequently change the LTFT percentage or go full time. Any such requests will need to be discussed with your TPD to ascertain if it may be possible.
- SIA posts can only be deferred to a future start date for the following statutory leave reasons:
 - Maternity or shared parental leave
 - Long-term sick leave

The deferred start date will be dependent on future availability of the same SIA and cannot be guaranteed if the future SIA posts are already allocated. In this case, an alternative SIA may need to be considered.

Please discuss any deferral requests with your TPD as soon as possible.

Timetable for 2027 - 28 SIA Process

Updated 2026-27 SIA information and handbook to be uploaded on London School of Anaesthesia website.	August 2026
Online application process for residents will begin and stay open for 1 month.	1 st September – 30 th September
TPDs to review and verify applications.	1 st – 30 th October
Applications sent to SIA module leads. Scores and rankings to be returned to HET and TPDs by SIA group leads as soon as possible.	1 st – 30 th November
TPD's to review all information and allocate residents to posts.	1 st – 15 th December
Residents informed of allocations and asked to confirm their acceptance.	1 st week of January - Residents informed 31 st January - Resident deadline to confirm acceptance
Rotational grids sent to College Tutors who will then inform their SIA leads of resident allocations.	April 2027 (for August intake) October 2027 (for February intake)
Notice period for changes to allocated SIAs	August 2027 start – by end of January 2027 November 2027 start – by end of April 2027 February 2028 start – by end of July 2027 May 2028 start – by end of October 2027

SIA Posts Application and Allocation Guidance Full-time & Less than full time (LTFT) Residents

The 2021 Anaesthetics Curriculum requires all residents to undertake **12 months (whole time equivalent)** of Stage 3 training in one or more areas of special interest (SIA). The curriculum also stipulates minimum and maximum training times (whole time equivalent) for certain SIAs:

- Clinical SIAs in Anaesthesia for Cardiac Surgery, Anaesthesia for Neurosurgery, Obstetric Anaesthesia and Paediatric Anaesthesia must have a *minimum* of 6 months training time (whole time equivalent).
- A *maximum* of 6 months training time (whole time equivalent) can be undertaken in any *one* of the non clinical SIAs.
- Pain Medicine requires a *minimum* of 6 months training time (whole time equivalent) but the curriculum also states that it is expected that Pain Medicine training should take 1 year (whole time equivalent).
 - The SIA in Pain medicine is NOT part of this application process and there is a separate Pan London application process for it.
 - Residents wishing to undertake an SIA in Pain Medicine should look at the *Pain Medicine Programme* section of the London School of Anaesthesia website for further details.
- Residents in a Dual Anaesthetics and ICM training programme will use the SIA year for completion of the required 12 months (whole time equivalent) of stage 3 ICM training.
 - Stage 3 ICM placements are NOT part of this application process and dual residents should discuss these with their ICM TPDs.
 - Dual residents are not eligible to apply for any SIAs via this process.

In order to meet the whole time equivalent requirements of the curriculum, the amount of time undertaken in each SIA will be determined by a resident's full-time / less than full time (LTFT) percentage and the SIA specialty itself.

The SIAs have been categorised into three groups (1, 2, 3) according to the whole time equivalent training time that can / should be undertaken in them (see table below).

All residents can undertake up to **two** SIAs and placement times will be allocated to ensure that the appropriate whole time equivalent training time is provided for the specific SIA. Thus, all residents will achieve the required 12 months (whole time equivalent) SIA training within their two allocated SIAs and there will not be a need or option for any resident to undertake a third SIA in order to achieve this.

Residents can apply for and will be allocated to SIAs as follows depending on their full time / LTFT percentage and the SIA group:

- **Full time**
 - 12 months of single SIA from group 1
 - Two x 6 month SIA from group 1 or 2
 - One x 6 month SIA from group 1 or 2 AND One x 6 month SIA from group 3

- **LTFT 80%**
 - 15 months of single SIA from group 1
 - One x 9 month SIA from group 1 or 2 AND One x 6 month SIA from group 2 or 3
 - [* Two x 7.5 month SIA from any group ... this option may be possible ONLY if **both** SIAs are in the same hospital and are undertaken consecutively]

- **LTFT 70%**
 - 18 months of single SIA from group 1
 - Two x 9 month SIA from group 1 or 2
 - One x 9 month SIA from group 1 or 2 AND One x 9 month SIA from group 3

- **LTFT 60%**
 - 21 months of single SIA from group 1
 - One x 12 month SIA from group 1 or 2 AND One x 9 month SIA from group 2 or 3
 - [* Two x 10.5 month SIA from any group ... this option may be possible ONLY if **both** SIAs are in the same hospital and are undertaken consecutively]

- **LTFT 50%**
 - 24 months of single SIA from group 1
 - Two x 12 month SIA from group 1 or 2
 - One x 12 month SIA from group 1 or 2 AND One x 12 month SIA from group 3

** This option **may** only be possible if **two** SIAs are undertaken consecutively **AND both** are in the same hospital. However, the complexity of this arrangement may mean that even in this scenario, it may still not be possible due to the potential negative impact on overall grid placements. TPDs will determine if such an arrangement will be possible at the time of allocation.*

All LTFT residents should seek advice from their TPDs prior to applying for SIAs, in order to ensure full understanding of the above process and to fully consider all the available options based on their individual circumstances.

SIAs will be offered to residents based on the full time / LTFT % information provided on their application form. Once an SIA placement is offered it **may not** be possible to then change the full time / LTFT % for the specific SIA that has been offered. Residents should discuss any potential change in full time / LTFT % at the earliest opportunity with their TPD and need to be aware that any such change **may** then necessitate a change in SIA location or even specialty.

SIA Specialty Groups – Minimum / Maximum / Recommended Training Times

Group 1 <i>Require a minimum of 6 months whole time equivalent training time</i> • Anaesthesia for Cardiac Surgery • Anaesthesia for Neurosurgery • Obstetric Anaesthesia • Paediatric Anaesthesia • Pain Medicine <i>[NOT part of this SIA application process]</i>	Group 2 <i>3 – 6 months whole time equivalent training time recommended</i> • Anaesthesia for Bariatric Surgery • Anaesthesia for Complex Orthopaedic Surgery • Anaesthesia for Hepato-Pancreato-Biliary Surgery • Anaesthesia for Major General Surgery • Anaesthesia for Ophthalmic Surgery • Anaesthesia for Patients with Complex Airway • Anaesthesia for Plastic Surgery and Burns Management • Anaesthesia in Resource Poor Environments • Anaesthesia for Thoracic Surgery • Anaesthesia for Vascular Surgery • Military Anaesthesia • Perioperative Medicine • Regional Anaesthesia • Transfer Medicine • Trauma and Stabilisation • Acute Inpatient Pain <i>[6 months WTE recommended in curriculum]</i>
Group 3 (Non clinical) <i>Non clinical SIAs – up to 6 months whole time equivalent training time in any one of these</i> • Management and Professional and Regulatory Requirements • Safety and Quality Improvement • Education and Training • Research and Managing Data	

Full time / LTFT percentage & Whole time equivalent SIA training time

The table below shows the whole time equivalent of the SIA placement time according to full time / less than full time percentage:

FT / LTFT	SIA placement time (months)	Whole time equivalent (months)
Full time	6	6
	12	12
LTFT 80%	6	4.8
	* 7.5	* 6
	9	7.2
	15	12
LTFT 70%	9	6.3
	18	12.6
LTFT 60%	9	5.4
	* 10.5	* 6.3
	12	7.2
	21	12.6
LTFT 50%	12	6
	24	12

* This option **may** only be possible if **two** SIAs are undertaken consecutively AND **both** are in the same hospital. However, the complexity of this arrangement may mean that even in this scenario, it may still not be possible due to the potential negative impact on overall grid placements. TPDs will determine if such an arrangement will be possible at the time of allocation.

Special Interest Area Posts:

ELCH - Evelina London Children's Hospital
 GOSH - Great Ormond Street Hospital
 GSTT - Guy's & St Thomas' Hospitals
 KCH - King's College Hospital
 KH - Kingston Hospital
 NHNN - National Hospital for Neurology & Neurosurgery (Queen Square)
 RBH - Royal Brompton Hospital
 SGH - St George's Hospital

Anaesthesia for Patients with Complex Airway		
SIA Leads:	Dr Imran Ahmad (GSTT): imran.ahmad10@nhs.net Dr Kariem El-Boghdadly (GSTT): kariem.el-boghdadly@nhs.net Dr Branavan Retnasingham (KCH): branavan.retnasingham@nhs.net Dr Jelena Devic (SGH): jelena.devic@stgeorges.nhs.uk	
Trust	Duration	Posts
Guy's & St Thomas' Hospitals	6 months	1 - 2 posts
King's College Hospital	6 months	1 post
St George's Hospital	6 months	2 posts

Anaesthesia for Bariatric Surgery and Perioperative Medicine		
SIA Lead:	Dr Tom Carter (SGH): thomas.shandcarter@stgeorges.nhs.uk	
Trust	Duration	Posts
St George's Hospital	6 months	1 post

Anaesthesia for Cardiac Surgery		
SIA Leads:	Dr Michael Shaw (GSTT): michael.shaw29@nhs.net Dr Jonny Weale (RBH): j.weale@rbht.nhs.uk Dr A Crerar-Gilbert (SGH): a.crerar-gilbert@nhs.net	
Trust	Duration	Posts
Guy's & St Thomas' Hospitals	6 months	1 post
Royal Brompton Hospital	6 months	1 - 2 posts
St George's Hospital	6 months	1 post

Anaesthesia for Hepato-Pancreato-Biliary Surgery

SIA Lead:	Dr Amy Dukoff-Gordon (KCH):	amy.dukoff-gordon@nhs.net
Trust	Duration	Posts
King's College Hospital	6 months	4 posts

Anaesthesia for Major General Surgery and Perioperative Medicine

SIA Leads:	Dr Vedahari Ponnaiah (GSTT):	vedahari.ponnaiah@nhs.net
	Dr Ravi Bhatia (KCH):	ravi.bhatia@nhs.net
	Dr Liana Geary (SGH):	liana.geary@stgeorges.nhs.uk
Trust	Duration	Posts
Guy's & St Thomas' Hospitals	6 months	1 post
King's College Hospital	6 months	1 post
St George's Hospital	6 months	1 post

Anaesthesia for Neurosurgery

SIA Leads:	Dr Brenda Nyamaizi (KCH):	b.nyamaizi@nhs.net
	Dr Eleanor Carter (NHNN):	eleanor.carter3@nhs.net
	Dr Lucia Misquita (NHNN):	lucia.misquita1@nhs.net
	Dr Audrey Tan (SGH):	Audrey.Tan@stgeorges.nhs.uk
Trust	Duration	Posts
King's College Hospital	6 or 12 months	1 post
NHNN Queen Square	6 months	1 post
St George's Hospital	6 months	1 post
NHNN Queen Square & St George's Hospital	12 months	1 -2 posts

Anaesthesia for Thoracic Surgery

SIA Leads:	Dr George Christodoulides (GSTT):	G.Christodoulides@nhs.net
	Dr Jonny Weale (RBH):	j.weale@rbht.nhs.uk
Trust	Duration	Posts
Guy's & St Thomas' Hospitals	6 months	1 post
Royal Brompton Hospital	6 months	1 post

Anaesthesia for Vascular Surgery		
SIA Leads:	Dr Heena Bidd (GSTT): Dr Chiara Tosini (SGH):	Heena.Bidd@nhs.net Chiara.Tosini@stgeorges.nhs.uk
Trust	Duration	Posts
Guy's & St Thomas' Hospitals	6 months	1 post
St George's Hospital	6 months	1 post

Obstetric Anaesthesia		
SIA Leads:	Dr Neel Desai (GSTT): Dr Adrian Dabrowicz (KCH): Dr Samuel Kestner (SGH):	neel.desai4@nhs.net adrian.dabrowicz@nhs.net samuel.kestner@stgeorges.nhs.uk
Trust	Duration	Posts
Guy's & St Thomas' Hospitals	6 months	1 - 2 posts
King's College Hospital	6 months	1 post
St George's Hospital	6 months	2 - 3 posts

Paediatric Anaesthesia		
SIA Leads:	Dr Paul Stevens (ELCH): Dr Sarah Nour (KCH): Dr Tom Breen (SGH): Dr Ellen Rawlinson (GOSH): Dr J Navaratnarajah (GOSH):	paul.stevens25@nhs.net sarah.nour@nhs.net thomas.breen@stgeorges.nhs.uk ellen.rawlinson@gosh.nhs.uk jamuna.navaratnarajah@gosh.nhs.uk
Trust	Duration	Posts
Evelina London Children's Hospital	6 months	4 posts
King's College Hospital	6 months	1 post
St George's Hospital	6 months	1 post
Great Ormond Street Hospital	6 months	3 posts
Great Ormond Street Hospital	12 months	

Regional Anaesthesia		
SIA Leads:	Dr Amit Pawa (GSTT): Dr Yousif Ali (KCH): Dr Ram Kumar (KH): Dr Ralph Zumpe (SGH):	amit.pawa@nhs.net yousif.ali2@nhs.net ram.kumar2@nhs.net Ralph.Zumpe@stgeorges.nhs.uk
Trust	Duration	Posts
Guy's & St Thomas' Hospitals	6 months	1 - 2 posts
King's College Hospital	6 months	1 post
Kingston Hospital	6 months	1 post
St George's Hospital	6 months	1 post

Trauma & Stabilisation		
SIA Leads:	Dr James Saffin (KCH): Dr Roger Bloomer (KCH): Dr Ali Watts (SGH):	jsaffin@nhs.net rogerbloomer@nhs.net Ali.Watts@stgeorges.nhs.uk
Trust	Duration	Posts
King's College Hospital	6 months	1 post
St George's Hospital	6 months	1 post

Management and Professional and Regulatory Requirements		
SIA Lead:	Dr Joe Lipton (GSTT):	JosephSamuel.Lipton@nhs.net
Trust	Duration	Posts
Guy's & St Thomas' Hospitals	6 months	1 post

Anaesthesia for Patients with Complex Airway

Guy's & St Thomas' Hospitals

SIA Supervisors: Dr Imran Ahmad & Dr Kariem El-Boghdadly

Email: imran.ahmad10@nhs.net / kariem.el-boghdadly@nhs.net

Background:

- The Airway SIA is predominantly based at the Guy's Hospital site
- This is an intense but clinically, educationally and academically rewarding SIA from which you will get out as much as you put in!
- By the end of the module you should have:
 1. Experience in managing expected and unexpected difficult airways
 2. Experience independently managing an airway list – airway biopsies, free flaps, laser lists
 3. Experience in awake tracheal intubations (ATI) – fiberoptic and videolaryngoscope
 4. Experience in the use of high-frequency jet ventilation – Monsoon and TwinStream
 5. Experience with Transnasal Humidified Rapid Insufflation Ventilatory Exchange (THRIVE)
 6. Experience organising, running and teaching on airway courses and workshops
 7. Experience with academic output – research, publications, presentations

Weekly Timetable:

- Most work will be in Ear, Nose & Throat and Maxillo-facial surgery: oral, pharyngeal and laryngeal surgery, neck surgery (including thyroid and mediastinal work) and facial surgery. Both specialties include complex cases often combined with plastic surgery.
- Occasionally you may be assigned to a dental list and day surgery ENT lists.
- There is some flexibility in theatre lists schedules and locations, and extra lists may be created to manage urgent cases

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
GMT 3	✓	✓	✓			
GMT 4	✓	✓	✓	✓		✓ (every 3 rd Sat)
GMT 6	✓ (alt weeks)					
GMT 15			*			
GT 23 Dental				*		
Airway clinic Guy's					✓ (alt weeks)	

Key: ✓ Definite airway cases; * potential airway cases

- Mondays – GMT 3 & 4
- Tuesdays - GMT 3 & 4 (GMT 6 for robotic head & neck fortnightly)
- Wednesdays - GMT 3 & 4

- Thursdays - GMT 3
 - Fridays - no scheduled complex airway lists
 - Saturdays - GMT 4 (usually 3rd Sat of the month). Attendance to a Saturday list is optional and will be compensated with a lieu day during the week.
- When there are no scheduled complex airway lists (usually Fridays), residents are expected to maximise clinical opportunities elsewhere.

Examples include:

- ENT nasendoscopy clinic on Friday mornings with Head & Neck surgical fellows: 3rd floor OPD, Bermondsey Wing. Ext 82216 – practice flexible nasendoscopy
 - Airway preassessment clinic
 - Performance of asleep fiberoptic intubations on ENT non-airway lists
 - Use of different videolaryngoscopes – C-Mac, Glidescope, Airtraq
 - Academic time (one full day per month)
- Consultant anaesthetists specialising in airway management at Guy's Hospital:
 - Dr Desire Adansi (nee Onwochei)
 - Dr Imran Ahmad (Airway Lead; SIA Co-Lead)
 - Dr Kariem El-Boghdady (Research Lead; SIA Co-Lead)
 - Dr Jeyanjali Jeyarajah (SIA Co-Lead)
 - Dr George Christodoulides
 - Dr MJ Daly
 - Dr Tom Potter
 - Dr Jonathan Watkiss
 - Dr Diana Bariesiene
 - Dr Sheela Badiger
 - Dr Britta Millhoff
 - Dr Ganesh Nair

Clinical Aims:

By the end of this SIA, you should aim to achieve and be capable in the following:

- Fiberoptic intubations – aim for 20-30 awake FOI & 20 asleep FOI over the 6 months
- Use of videolaryngoscopes – C-Mac, Glidescope, Airtraq
- Intubation through supraglottic airways
- Cricothyroid puncture – USS scanning, marking and potentially gaining access
- Front of neck access – scrub with surgical team for at least one surgical tracheostomy
- Tubeless field cases: High Frequency jet ventilation with the Monsoon or TwinStream, THRIVE cases
- Extubation strategy in patients with anticipated difficult airways
- Complete a free flap case from start to finish, including transfer and handover to Guy's Critical Care Unit
- Running an airway list independently and communication with surgical colleagues
- Leadership and perioperative planning with multi-disciplinary teams
- Use of innovative techniques for managing the complex airway
- Cleaning, scope care and traceability
- Difficult airway guidelines

Teaching Aims:

- You are expected to participate in the following:
 - Good clinical practice course – **this is essential if you want to take part in active clinical research.**
 - Attend a well-recognised difficult airway course as faculty e.g. Guy's Airway Management Course (GAMC), DAS
 - Participate in theatre airway teaching to nursing / ancillary staff
 - Participate in teaching for medical students, novices, juniors and regional study days with Dr Gunjeet Dua.

Academic and Management Aims:

- There will be opportunities for you to produce written work for both scientific meetings and publication in peer-reviewed journals. Previous SIA residents have had publications in Anaesthesia, BJA and CJA.
- Keep up to date with recent airway literature in peer-reviewed journals. There may be opportunities to submit letters for correspondence to articles.
- Research opportunities in conjunction with the TAP research group.
- Systematic reviews or original research projects – aim to get involved with at least one during the module.
- Keep an eye out for interesting cases that can be written up as case reports.
- Prepare abstracts/posters for submission to relevant anaesthetic meetings, especially DAS/WAMM, but also look towards international meetings. Bursaries are available by application via the TAP research group to help fund these. Proposed meetings include:
 - Association of Anaesthetists meetings
 - DAS/WAMM
 - ESA
 - NWAC
 - SHANA
 - SETSA meetings
 - ASA
- Audits/QI projects – aim to complete one during the module.
- Development of guidelines or policies

Summary:

- At the end of this Airway SIA you should have completed the following:
 - 20-30 awake tracheal intubations and be capable in performing them INDEPENDENTLY
 - 20 asleep fiberoptic intubations
 - Achieved skills in other airway techniques e.g. intubation through SGA, jet ventilation, front of neck access, tubeless field, and apnoeic oxygenation.
 - Attended GCP course
 - Attended at least one advance airway course as faculty
 - Presented in at least one national/international meeting +/- publication
 - Completed one audit/QI project
- The above is achievable in the six months as long as you work hard and consistently. At the end of the SIA, if you have successfully achieved all of the targets, you will have covered important CPD areas such as clinical experience, teaching & training, management & research.
- **If you are successful at being offered this SIA, please contact the unit supervisors 1-2 months before starting to establish which projects you may need to take over and complete.**

Anaesthesia for Patients with Complex Airway

King's College Hospital

SIA Supervisor: Dr Branavan Retnasingham

Email: branavan.retnasingham@nhs.net

Background:

King's College Hospital is one of the largest and busiest in London, with a well-established national and international reputation for clinical excellence, innovation and achievement. Two thirds of the clinical activities of the hospital are in support of the socially and economically diverse communities of the boroughs of Southwark and Lambeth. The hospital provides a broad range of secondary services, including specialist emergency medicine (e.g. Major trauma, cardiac, neuro and stroke). It also provides a number of leading-edge tertiary services, such as liver transplantation, neurosciences, blood cancers treatments, foetal medicine, cardiology and cardiac surgery, on a regional and national basis.

Overview:

The post will be based at Kings College Hospital NHS Foundation Trust. King's is a Major Trauma Centre, a centre of excellence for bariatric surgery, endocrine surgery, and a tertiary referral centre for maxillofacial surgery. In addition, there is a regional neurosurgery centre carrying out complex elective and emergency procedures. King's is also a cardiothoracic centre with about 900 elective and emergency cases. The surgical workload is supported by surgical and medical critical care units; proposed to have 150 beds by 2021. These units also admit medical emergencies from the South East region.

All of the above ensures a comprehensive exposure to a wide variety of challenging cases for airway management both in the acute and elective situation. The accident and emergency department sees 100,000 patients annually, including 350 major trauma cases. Many of these have complex issues around airway management both in the resuscitation room and subsequently in the operating theatres.

The SIA resident will also gain additional airway management experience on Bariatric surgery lists performed at the Princess Royal University Hospital site at Orpington.

Six month post in Advanced/SIA Airway Management:

This programme enables you to become a confident and skillful anaesthetist who can manage any day-to-day airway related problems in your future anaesthetic career.

Clinical experience:

- Morbid obesity / Training in **Bariatric anaesthesia** and airway management (1 day/week).
- Airway management list for **maxillo-facial surgery** both elective and emergency with a particular emphasis on trauma and the airway.
- Management of the **Major Trauma airway** and for cervical spine surgery, including particularly those with spinal instability.
- Airway management in complex thyroid and endocrine surgery.

- Dento-alveolar list with acute and elective challenging airway.
- Provide opportunity to become an expert in using Glidescope, C-Mac, McGrath, Kingvision, APA, Airtraq and Pentax AWS.
- Senior SpR duties for out of hours emergencies managing major trauma, major haemorrhage, cardiac, paediatric and airway management.
- Master the fiberoptic skill (both awake and asleep) and also hybrid intubation techniques.
- **Protected research day (1 day/week).**
- **Protected airway training lists**
- **Protected airway training list (Day time) on on-call days**
- Gain confidence in morbid obese airway

Provisional Timetable (can be adjusted to your convenience):

	AM	PM
Monday	Maxillo-facial Surgery	Maxillo-facial Surgery / maxilla-facial trauma
Tuesday	Maxillo-facial Surgery	Maxillo-facial Surgery
Wednesday	Protected research day	Protected research day
Thursday	Airway flexi day	Airway flexi day
Friday	Bariatric Surgery	Bariatric Surgery

Procedural Goals:

- Awake fiberoptic intubations 25
- Fiberoptic intubation under GA 50
- Videolaryngoscopy 75
- Rescue intubation (Via LMA) 10
- Hybrid intubation technique 10
- Extubation technique (Deep, awake, Remi, staged extubation)
- Airway speciality: Morbid obesity/ Bariatric airway, Trauma airway & ITU airway, Paediatric and Emergency airway

Leadership development:

- **Resident Lead for King's International Airway Workshop**
- Resident Lead for King's Awake Fiberoptic Intubation Course
- Lead for curriculum based departmental airway teaching
- ITU difficult airway course co-organiser
- Echo course co-organiser

Teaching commitment:

- Year 3 medical students
- Final year medical students' anaesthesia taster course
- Pre-fellowship Resident anaesthetist monthly teaching
- Trainee ODP teaching

Management meeting:

- Deteriorating patient care committee
- Surgical safety committee meetings
- Trust airway forum meetings

Publications & Presentations:

- Expected to present five posters during the term

International Airway Conferences:

- Travel allowance paid for one international airway meeting (require a minimum 2 posters to present)

Research:

- One day/week protected research day

Anaesthesia for Patients with Complex Airway

St George's Hospital

SIA Supervisor: Dr Jelena Devic
Email: jelena.devic@stgeorges.nhs.uk

Background:

This post is designed to expose the resident to a wide variety of advanced airway techniques. The post will usually be of 6 months duration (but may be longer for less than full time residents). The resident will carry out regular clinical sessions on designated ENT and maxillo-facial lists as well as on Trauma lists and Emergency lists to ensure confidence in emergency airway management. Residents will also be allocated to thoracic lists to gain experience in double lumen tube insertion/anaesthesia for rigid bronchoscopy.

A programme exists to allow residents to attend Consultant-led ENT clinics to learn Flexible Nasendoscopy skills in the non-theatre setting. Residents will also be encouraged to attend preoperative assessment clinics to gain experience in all aspects of care for a head and neck patient. Provision of a weeklong placement/observership at another airway centre may also be available.

The Advanced/SIA residents are expected to have participated actively in audit, research and teaching, as detailed below.

Clinical Expectations:

- Ability to pre-assess complex Airway cases and autonomously formulate a safe anaesthetic plan, including specialist airway management plans.
- Run airway list ensuring effective communication with surgical colleagues.
- Competence with a range of videolaryngoscopes – Glidescope, Aitraq, Suresight.
- Competence with intubation via SGA.
- Competence with Bonfils intubating scope.
- Competence in Awake tracheal intubation, including both fiberoptic and VL approach.
- Competence utilising varied topicalisation techniques for awake tracheal intubation (+ sedation techniques such as remifentanyl and dexmedetomidine).
- Competence with use of Transnasal Humidified Rapid Insufflation Ventilatory Exchange (THRIVE)
- Exposure to techniques for tubeless field anaesthesia, and for HFJV techniques, using Monsoon and Evone ventilators.
- Exposure to technique of sub-mental intubation.
- Exposure for specialist extubation techniques including exchange catheter use.
- Exposure for advanced techniques for ETT exchange in high risk airway cases.
- Exposure and understanding of requirements for Airway cases requiring free flap surgery.
- Exposure to cricothyroid puncture and familiarity with surgical front of neck access techniques.
- Exposure to anaesthesia for paediatric airway cases including emergency cases.
- Competence in flexible nasal endoscopy in ENT clinic setting.

In addition to list allocation, residents are encouraged to join the on call team communication group as many interesting airway cases are admitted through the emergency department, to either manage, assist or observe these cases. This system, as well as the need for Airway residents to be **proactive** in seeking out airway cases, allows for exposure to maximal/varied cases. List allocation and case exposure will be reviewed on a 3 monthly basis to ensure target case exposure is being achieved. On call commitment will be on a senior general on call rota providing exposure to emergency work of all varieties; SGH status as a trauma centre provides a particularly useful case mix.

Teaching expectations:

- Planning and delivery of ODP/nurse airway training sessions (minimum 1 session).
- Presentation at departmental meeting –ideally M+M meeting (minimum 1).
- Faculty on Regional or National Airway Course (courses run at SGH or as external course faculty).
- Faculty for anaesthetist in-house airway skills courses (including Surgical Airway refresher and Simulation Airway training).
- Generate a minimum of one case report with accompanying literature search to be submitted to 'shared' folder to facilitate collaborative learning (this will also encourage preparation of case reports for wider publication/presentation).

Audit/ Research:

Advanced Airway Residents must initiate, conduct and **complete** an airway related audit or QI project during their placement, which should be presented at both local and National level (minimum 1, but usually more). The majority of residents will have >1 abstract accepted at scientific meetings, including, DAS, AAGBI, GAT, HANA etc. All projects should be discussed with Dr Devic or Dr Mir (Airway Research Lead). There will be opportunities to participate in any on-going research projects if interested although this is not compulsory and may involve continuation of a project already underway.

Summative Assessment Requirements:

In order to meet the summative assessment requirements, evidence of experience and case logbook, supervised learning events, personal activities and reflections as well as a satisfactory MTR must be demonstrated.

Module Support:

- Initial meeting within first 2 weeks to map out targets including projects.
- Interim at 3-month stage to assess progress.
- Final: On completion of the placement you will need to be signed off for all clinical and non- clinical components of the module. The criteria laid out in the RCoA Curriculum Learning Syllabus Stage 3 Specialist Interest Area will need to have been satisfied (please see attached at end of this document).
- Consultant feedback from the Group of Airway Consultants will be gained toward the end of the placement. It is also recommended to complete a formal 360-degree assessment during your Airway module.
- All residents will also be allocated an Educational Supervisor to ensure support for all aspects of their career progression and ARCP success.

RCoA 2021 Curriculum learning syllabus: Stage 3 Special Interest Areas- Anaesthesia for Patients with Complex Airway

Airway management:

Advanced training in airway management should be delivered in centres undertaking a wide variety of complex elective and emergency surgical cases presenting specific airway problems. It is expected that between three and six months will need to be spent acquiring all the competencies/learning outcomes in this advanced unit of training.

Learning outcomes:

- *Provides safe perioperative airway and anaesthetic care for a wide variety of patients with complex airway problems independently*
- *Is capable of leading the delivery of care in this area of anaesthetic practice, to the benefit of both patients and the organisation*

Key Capabilities:

- A** Is a senior decision maker within the multi-disciplinary team in planning the appropriate airway management in patients with advanced airway pathology
- B** Can proficiently manage the difficult paediatric airways that may present in any non-specialist hospital
- C** Performs awake and asleep intubation in all patients with advanced airway pathology
- D** Can plan and manage at-risk extubation
- E** Utilises techniques for apnoeic oxygenation and ventilation
- F** Proficient in front of neck access to the airway
- G** Is proficient in independently managing anaesthesia for patients needing a wide range of major head and neck surgeries

By the end of the module the resident should be able to manage independently with no supervisor involvement (although should inform consultant supervisor as appropriate to local protocols).

Further details of HALO Summative Assessment Requirements for this Specialist Interest Area can be found at <https://rcoa.ac.uk/documents/2021-curriculum-learning-syllabus-stage-3-special-interest-areas/anaesthesia-patients>.

- If you have any queries regarding the Airway SIA please get in touch on jelena.devic@stgeorges.nhs.uk.

Anaesthesia for Bariatric Surgery

St George's Hospital

SIA Supervisor: Dr Tom Carter

Email: thomas.shandcarter@stgeorges.nhs.uk

Background:

St George's Bariatric Service stands out as one of the scarce revision centres in the UK, offering a comprehensive range of bariatric procedures like gastric bypass, sleeve gastrectomy, two-stage procedures, and revision bariatric surgery. Additionally, St George's is an anti-reflux centre where advanced procedures such as LINX and Stretta, funduplications, and revision surgery are performed. The hospital also collaborates with Harefield Hospital, where they conduct anti-reflux and bariatric surgery for lung transplant recipients.

The aim of this role is to develop the necessary skills and experience in the management of patients presenting for bariatric surgery, as well as gaining a robust understanding and experience in the perioperative processes for optimizing these patients.

As the holder of this post, you will become confident and experienced in managing morbidly obese patients presenting for both bariatric and non-bariatric surgery, and you will acquire the necessary communication skills to ensure rigorous consent and risk stratification for these patients. This post will enable you to take up a consultant post with a subspecialty interest in bariatric anaesthesia or as an Obesity Lead, a position that is recommended for all anaesthetic departments by the Association.

You will have exposure to a range of bariatric surgical procedures. Initially, you will be supervised in theatre, but as your skills progress, you will gradually move towards managing an elective bariatric case independently, with no supervisor involvement towards the end of your placement.

You will have the opportunity to attend the Bariatric Multidisciplinary Team (MDT) weekly meetings on a Wednesday, at least twice during this six month post. The MDT is attended by the lead bariatric anaesthetist, bariatric surgeons, a metabolic consultant physician, and the allied healthcare team, including psychologists, physiotherapists, and dieticians. All patients must go through the MDT process before being approved for surgery.

As part of the surgical work-up, you will learn to provide risk stratification to patients with obesity-related complications as part of a robust consent process. You will also develop skills to interpret investigations relevant to risk stratification for the bariatric surgical patient, specifically including sleep studies. You will be trained in techniques for safe management of the bariatric airway, including high flow nasal oxygen, video laryngoscopy, and CPAP. Additionally, you will learn techniques for utilizing obesity-specific equipment, including hover mattresses, ultrasound-guided intravenous access, long arterial lines and TIVA for obese patients.

There is an active research and audit programme within the bariatric team and you will be encouraged to participate in local, regional and national projects.

RCoA Curriculum – SIA in Anaesthesia for Bariatric Surgery

Experience and logbook:

- experience of a range of bariatric surgical procedures
- pre-operative assessment of patients planned for bariatric surgery including use of different risk scoring systems and indications for further investigation.

Supervised Learning Events (SLEs) can be used to demonstrate:

- assessment and management of cases with high BMI including those undergoing obesity surgery
- understanding of the different factors relevant to airway management in these patients
- evaluation of sleep studies and their impact on the perioperative management including indications for referral
- assessment and management of complications associated with high Body Mass Index (BMI) such as OSA and VTE management
- use of TIVA in management of bariatric patients including discussion of the different models involved.

Personal Activities and Personal Reflections may include:

- national and international meetings related to anaesthesia for bariatric surgery and specialist societies
- presentation at relevant meeting e.g. abstract or free paper
- development of guidelines and policies related to management of patients with high BMI
- leadership of QI projects related to patients with high BMI undergoing surgical procedures
- leadership training.

Other evidence:

- satisfactory MSF.

Suggested supervision level

- 4 - should be able to manage independently with no supervisor involvement (although should inform consultant supervisor as appropriate to local protocols).

Cross links with other domains and capabilities

- all generic professional domains of learning
- *Perioperative Medicine and Health Promotion*
- *General Anaesthesia*

Anaesthesia for Cardiac Surgery

St. Thomas' Hospital

SIA Supervisor: Dr Mike Shaw

Email: Michael.shaw29@nhs.net

Background:

Guy's and St. Thomas' Hospital is one of the largest and most well known NHS trusts in the UK, with an international reputation for clinical excellence. Cardiac surgery takes place on the St. Thomas' site and our service provides elective and emergency cardiac surgery to patients of all ages from the South East of England and beyond. 4 cardiac theatres and 1 hybrid theatre are employed to undertake over 1000 CPB cases per year, covering the full spectrum of cardiac surgery aside from transplantation. A large structural heart disease programme encompasses trans-catheter approaches to the aortic and mitral valve as well as ASD and PFO closures. In addition, there are daily electrophysiology lists providing ablative and pacing treatments. Training for anaesthesia for patients with GUCH can also be provided as well as opportunities to visit the severe respiratory failure /ECMO service run by our colleagues in critical care.

The hospital has a well developed programme for the care of patients undergoing surgery to aortic root, arch and descending aorta, as well as an active service for minimally invasive aortic and mitral surgery.

The 11 bedded overnight intensive recovery (OIR) provides post operative care to the vast majority of patients undergoing cardiac surgery in the hospital, and also cares for patients who have undergone major vascular, upper GI, lower GI and plastic surgery. The on call commitment for the post will usually be on the OIR or as the senior on site anaesthetic registrar at St. Thomas 'Hospital.

The team of consultant cardiac anaesthetists are cohesive, friendly and dedicated and we work with a group of exceptional, affable and supportive surgeons and cardiologists. Residents are often surprised by how much they enjoy their time with us!

Although ideally suited to a resident pursuing a career in cardiothoracic or vascular anaesthesia, this SIA offers a number of transferable skills that are useful in the anaesthetic management of any high-risk surgical case. I strongly believe undertaking this SIA will equip you with a skill set that will be proud of, no matter what path your career takes. I am delighted to be contacted if you are interested and would like to know more about the post.

Clinical Capabilities

- Proficiency in managing the induction of a stable and unstable cardiothoracic patient.
- Ability to competently manage elective CABG and AVR under local supervision.
- Develop experience and expertise in the management of more complex cardiac surgery including aortic dissection, endocarditis, thoraco-abdominal aortic repair and emergency cardiac procedures.
- Develop experience in managing trans-catheter techniques and complex coronary intervention
- Proficiency in lung isolation techniques, transvenous pacing and echocardiography.
- Ability to manage significant blood loss, coagulopathy and cardiovascular instability using a variety of

monitoring modalities and point of care testing devices including pulmonary artery catheters and TEG.

- Mastery of the insertion of invasive monitoring lines.
- Develop expertise in peri-operative medicine.
- Develop skills in in-theatre communication and team working.
- Development of skills in managing post operative cardiac surgical patients including those needing mechanical circulatory support.

There are also ample opportunities to achieve competencies in the generic professional domains of learning:

Research and Managing Data:

- There is a well established and burgeoning research and QI programme supported by 3 research ODPs.
- Participation in the national ACTACC audit projects

Education and Training:

- Opportunities to be part of faculty for the Theatres, anaesthesia and Perioperative medicine (TAP) academy.
- Delivery of KCL medical student teaching - lectures, practical and small group sessions.
- In house cardiac anaesthesia and ICM teaching for intermediate and higher residents.
- CALS.
- Pan London Training Days.

Safety and Quality Improvement:

- Monthly echocardiography review with colleagues from cardiology.
- Monthly journal club, clinical governance and research group meetings.
- TOE simulator.
- ACTACC National audit projects.

Management and Professional & Regulatory Requirements:

- Participation in the departmental GPC programme, which offers training and learning across multiple streams including sustainability, clinical governance and innovation.

Anaesthesia for Cardiac/Thoracic Surgery

Royal Brompton Hospital

SIA Supervisor: Dr Jonny Weale

Email: jonathan.weale1@nhs.net

Background:

The Royal Brompton and Harefield hospitals make up the largest specialist heart and lung centre in the UK and among the largest in Europe. Royal Brompton Hospital was founded in 1840 and joined the NHS in 1948. The National Institute for Health Research (NIHR) set up a research unit within the hospital in 2010 and the hospital has always undertaken pioneering and world-class research into heart and lung disease.

Clinical teams at Royal Brompton Hospital care for patients with a wide range of complex cardiac conditions, including congenital (present at birth), inherited and acquired. Our hospitals are world leaders in the diagnosis, management and treatment of lung disease. Our children's services provide care from before a child is born, throughout childhood and into adolescence, before managing a smooth transition to our adult teams.

Today we are the only centre in the country with a total artificial heart programme and our cystic fibrosis experts are pioneering opportunities in remote digital care. Our teams have always pushed boundaries, working in partnership to harness new technology and deliver the very highest standards of patient care.

WEBSITE:

<https://www.rbht.nhs.uk>

What would your clinical exposure consist of?

This attachment will provide broad exposure to cardiac and thoracic anaesthesia, and can be focused on either. There is also the opportunity to develop specialised skills in some areas of paediatric and vascular anaesthesia.

The Royal Brompton hospital has six cardiothoracic operating theatres, one of which is a specialist hybrid theatre for combined cardiac/vascular procedures, performing about 1500 cardiac and 2000 thoracic cases per year, encompassing adult, paediatric and neonatal surgery and the largest adult congenital heart disease programme in the UK.

Five cardiac catheter laboratories use cutting-edge technology to carry out a very broad range of procedures including electrophysiological studies and procedures, trans-catheter replacement of aortic and mitral valve, VSD, ASD and PFO closures and other procedures on both adults and children with CHD and pulmonary hypertension.

- **Mitral Programme:**
 - A group of specialist surgeons and cardiologists provide care for patients with mitral valve disease, which includes minimally invasive repairs, tendynes, clips, neocords and replacements and tricuspid valve surgery.
- **Aortic programme:**
 - Royal Brompton has a specialist and dedicated aortic and vascular surgery team which care for patients undergoing surgery to the aortic root, arch and descending aorta, including minimally invasive aortic surgery and emergency aortic surgery.
- **Congenital Heart Disease and Paediatric Cardiac Surgery:**
 - The Royal Brompton Hospital practices a vertical model of care for congenital heart disease, caring for all patients from pre-birth to adult congenital heart disease (ACHD) within one service. Training at RBH will give you broad exposure to all aspects of anaesthesia and perioperative care for ACHD and paediatric congenital surgery.
 - Two of our congenital cardiac surgeons have a special interest in ACHD surgery, including multi-valve operations, complex redo procedures and less-invasive techniques such as PEARS, using mechanical support, such as VA- and VV-ECMO, where necessary to support operations.
 - In addition to open surgical cases, we also have dedicated ACHD interventionists performing a full range of trans-catheter procedures, from diagnosis to percutaneous valve implantation and repair. RBH is home to one of Europe's only catheter magnetic navigation systems allowing procedures to be safely performed in people with complex cardiac anatomy.
 - As well as anaesthesia, there are daily clinics in ACHD and pulmonary hypertension, regular MDT meetings, and a range of academic opportunities such as weekly cardiac morphology seminars.
 - The paediatric anaesthesia department offers a specialist service covering all ages of children, from extreme pre-term onwards. As well as the full range of cardiac surgical and diagnostic and interventional cardiology procedures, you will also be exposed to anaesthesia for respiratory disease e.g. bronchoscopy and lung washout, diagnostic cardiac procedures e.g. MRI and CT, and non-cardiac procedures in children with complex heart disease, such as ENT, general surgery, dentistry and thoracic surgery.
- **Thoracic surgery:**
 - We have a team of 4 thoracic surgeons operating on adults and children. We carry out Video Assisted and open thoracotomies for lung resection, lobectomies and pneumonectomy as well as lung volume reduction surgery, and complex procedures which include major thoracic resections, often combined with a visiting plastic surgeon. We have a significant number of large airway interventions including laser treatment and stent insertion.

Every theatre and catheter lab is equipped with a TOE machine and there is an active TOE training programme throughout the hospital. We have a TOE simulator and we do regular teaching sessions with this.

Post procedure, the patient will go to the 8-bed overnight recovery unit, or one of three critical care areas (two adult, one paediatric/neonatal). You will have exposure to PA catheters, cardiac output monitoring, intra-aortic balloon pumps, impella and many patients receiving both venous and arterial ECMO.

Your on-call commitment will be to anaesthesia only, as intensive care units are separately staffed. Training and exposure in these areas can be arranged should you so wish.

Clinical aims:

During this attachment the resident will have exposure to all of the key capabilities for cardiac and thoracic anaesthesia, as well as the opportunity for considerable exposure to complex vascular and paediatric surgery.

- Provide anaesthesia for a cardiac surgical list of uncomplicated CABG, AVR or combined procedures independently
- Manage the anaesthetic care of a complex valve case and a major aortic case with local supervision
- Assess and provide perioperative care for off pump cardiac surgical procedures independently
- Manage cardiac surgical cases with poor biventricular function and plans on-going care
- Provide anaesthesia for interventional cardiology procedures e.g complex coronary intervention, transcatheter aortic valve insertion
- Evaluate point of care tests and utilise appropriate bleeding algorithms to manage peri and post bypass operative bleeding
- Manage emergency anaesthesia for post cardiac surgical complications
- Undertake learning and delivery of transoesophageal echocardiography
- Provide intensive care to the post-operative cardiac surgical patient
- Explain the principles of cardiac transplantation
- Manage patients requiring mechanical circulatory support during the perioperative period, including VA and VV ECMO, intra-aortic balloon pump, impella and protek.
- Assess and manage the perioperative care of VATS lung or pleural biopsy independently
- Manage the perioperative care of patients for a wide range of major thoracic surgical procedures
- Provide a range of appropriate perioperative multimodal pain management for thoracic procedures
- Assessment and manage patients with recurrent pneumothoraces, or for pleurectomy or bullectomy
- Manage airway interventions for benign and malignant disease including tracheal stents and tumour debulking
- Manage the patient with pleuro-pulmonary sepsis independently

Academic, Teaching and Management Aims:

Brompton has an active research and audit programme (supported by research staff) which you are encouraged to be involved in.

- You should aim to complete a scientific or quality improvement project aiming to present at a scientific meeting.
- Achieve authorship in scientific journals and/or textbooks.
- Attend weekly TOE meeting.
- Attend a weekly morning of academic activities for anaesthesia residents including journal club, lectures and external tutorials from surgeons, cardiologists etc.
- TOE simulator.
- In house CALS (Cardiac Surgical Advanced Life Support) course and other simulator courses run by the hospital (SPRINT simulated interprofessional team training).
- Various MDT meetings: ICU, mitral valve, TAVI, aortic, thoracic, paediatric, ECMO.
- Governance programme including M&M monthly for 1 day each month.
- Grand rounds, varying specialities, monthly.
- RBH regularly holds a week long management and leadership training course which you would be encouraged to attend.

Summary:

Brompton will provide the resources and environment for a broad education and training. You will be supported and encouraged to take on responsibilities tailored to your individual abilities and needs. We think that you will find the specialised training for cardiothoracic anaesthesia challenging, fascinating and enjoyable.

Education Team and Important Contacts:

College Tutor & SIA Supervisor

Dr Jonny Weale
jonathan.weale1@nhs.net

Educational Supervisors

Dr Mary Lane
Dr Caterina Vlachou
Dr Nicoletta Zimbler
Dr Mark Edsell
Dr Jo Gan

Resident Representative

(Subject to rotation)

Service Manager – Anaesthesia & Critical Care

Miss Mina Patel
mina.patel24@nhs.net

Anaesthesia for Cardiac Surgery

St George's Hospital

SIA Supervisor: Dr Agatha Crerar-Gilbert

Email: a.crerar-gilbert@nhs.net

The 6 months (whole time equivalent) post is primarily aimed at residents pursuing a career in cardiothoracic anaesthesia. However it will also benefit anaesthetists who will embark on any major surgery such as vascular, major abdominal and management of major trauma.

The SIA cardiac resident will have exposure to a wide variety of cardiac surgical, thoracic, large airways and cardiology procedures. The overall aim is for a resident to acquire experience up to the level of clinical independence and ability to manage own daily cardiac/thoracic operating lists.

Background:

Location: St Georges Hospital NHS Trust

Resources available at St George's:

- Four cardiothoracic operating theatres, performing about 1200 cardiac and above 2000 thoracic surgeries a year.
- Five Cardiac Catheter laboratories providing mapping and ablations of cardiac arrhythmias as well as TAVI transcatheter aortic valve insertions and mitral clips.
- Largest in Europe Large Airways intervention centre with weekly rigid bronchoscopy lists carrying out treatment of large airways compromise, including laser interventions and stent insertion.
- Variety of complex cardiac procedures include complex mitral valve repairs, tricuspid valve surgery, aortic root and ascending aorta replacement, septal myectomies and others.
- Cardiac surgery undertakes emergency procedures including repair of aortic dissection, repair of VSD and treatment of complications of bacterial endocarditis.
- Four modern TOE machines with 3D function are available for daily use in all cardiac surgical cases.
- TEG and platelet mapping equipment for use in cardiac theatres.
- Disposable bronchoscopes are available for all double lumen tubes insertion.
- All cardiac consultants are skilled in TOE.
- Majority of cardiac consultants have BSE or equivalent accreditation.
- Number of consultants examine for BSE accreditation and are supervisors for TOE log books.
- Cardiac intensive care with expertise to provide mechanical cardiac support.

Clinical Aims:

During this SIA the resident will demonstrate:

- Independent practice for most elective cardiac surgical procedures e.g. CABG (on & off pump) and AVR.
- Understanding of management of some complex surgery such as MV surgery, complex aortic surgery including surgery on the aortic arch and MIDCAB.
- Proficiency in lung isolation techniques using bronchoscopic guidance.

- Understanding of TAVI (transcatheter aortic valve implantation) procedures including selection criteria, preoperative assessment and intraoperative management.
- Advanced use of perioperative TOE.
- Ability to perioperatively manage high-risk patients with complex cardiac and respiratory disease.
- Procedural technical skills generic to any major surgery.
- Ability to treat intraoperative haemodynamic instability and compromise.
- Ability to manage intraoperative coagulation derangements guided by bedside functional analysis.

Academic and Management Aims:

During this SIA the resident will be supported and encouraged to:

- Complete a scientific or quality improvement project.
- Present at the ACTA or EACTA (Association of Cardio-Thoracic Anaesthetists, European Association of Cardio-Thoracic Anaesthetists).
- Achieve authorship in scientific journals and/or textbooks.

Teaching Aims:

During this SIA the resident will have opportunities to engage in the following in-house learning:

- ECHO training and meetings
- In house CALS (Cardiac Surgical Advanced Life Support) course
- Cardiac ICU/anaesthesia tutorials (weekly)
- CT registrars teaching session (weekly)
- Daily MDT meetings
- Weekly Journal Club
- Weekly CTICU M&M
- Monthly cardiac surgical M&M

Summary

The cardiothoracic unit at St George's provides resources and environment conducive to education and training. All consultants are keen to teach and to explore your potential. You will be supported and encouraged to take on responsibilities tailored to your individual abilities and needs. You will be offered solo lists only when you are confident enough and ready for it.

Above all, we hope that you will find the SIA challenging, stimulating and enjoyable. Previous residents can attest to this.

Anaesthesia for Hepato-Pancreato-Biliary Surgery and Liver Transplantation

King's College Hospital

SIA Supervisor: Dr Amy Dukoff-Gordon

Email: amy.dukoff-gordon@nhs.net

King's College Hospital (KCH) has one of the busiest liver transplant units in the UK, with some of the best outcomes in Europe. We carry out around 250 adult and paediatric liver transplants per year, this includes a number of liver/kidney, multi-visceral and living related transplants. Approximately 50% of the annual caseload of 1000 patients admitted to LITU are admitted with complications of chronic liver disease.

As a tertiary referral centre for complex hepatobiliary surgery, there is a large and varied caseload including liver resections, pancreatic surgery including islet cell transplants and neuroendocrine tumour resections. There are also dedicated paediatric HPB lists. There is also a dedicated endoscopy service carrying out complex ERCP and EUS.

Background:

- King's College Hospital, Denmark Hill.
- 4 RCoA approved, SIA posts (6 months)
- 1 non-training liver post – usually filled by post CCT or overseas candidate (separate application process).

Transplant (+/- HPB) Consultants

- Dr Charl Jooste (clinical lead)
- Dr Chris Nicholson
- Dr Paul Bras
- Dr Anneliese Rigby
- Dr Anish Gupta (research interest/paeds tx lead)
- Dr Andrew Pool
- Dr Lucy Dancy
- Dr Aidan Devlin
- Dr Dan Henderson
- Dr Amy Dukoff-Gordon (SIA lead)

HPB consultants

- Dr Tim Hughes
- Dr Derek Amoako
- Dr Roger Bloomer
- Dr Oliver Hargrove
- Dr Beth Ikponmwosa (CD)
- Dr Alex Kumar

- Dr James Saffin
- 3 liver theatres (1 transplant and 2 hepatobiliary) with a dedicated SSDU (4 level 2 beds), and Liver ICU (15 level 3 beds).
- Standard theatre days allocated to either HPB or liver transplant theatre.
- Non-resident on call covering adult and paediatric liver transplant and related complications. You will always be working directly alongside a consultant. Transplants often happen at unsociable hours.
- There is no requirement to live close to King's as coordinators can let you know well in advance of transplant start time. This may be at any time of day or night so total reliance on public transport is probably not practical - a car, bike or other means of personal transport would be useful for on-calls.
- For those living further away, we would strongly recommend consulting those who have done the post previously from a distance to ensure understanding of the practicalities and/or advice on utilising KCH oncall facilities, especially for weekend oncalls. It is not uncommon to be finishing and travelling home at 3am etc.

Clinical Aims (in line with new curriculum):

- Involvement in 20-25 liver transplants.
- To become proficient in the independent delivery of safe perioperative care for a wide variety of complex hepato-pancreato- biliary (HPB) procedures.
- Experience in paediatric complex major surgery.
- Involvement and understanding of the pre-assessment process for liver transplants.
- Attendance at high risk HPB pre-assessment clinic.
- Understanding the identification and management of systemic issues secondary to liver disease such as portal hypertension, hepatopulmonary syndrome and portopulmonary hypertension.
- Clinical skills – Central access, PiCCO, arterial lines, thoracic epidurals, thromboelastometry, cardiac output monitoring.
- Management of massive blood loss and coagulopathy.
- Management of complex physiology during major surgery.

Academic and Management Aims:

- Expected to participate in departmental research and audit/QI projects, both in transplant and HPB.
- Attendance and participation in weekly transplant listing meeting, paediatric listing meeting, M&M meetings.
- Opportunity for academic submissions to relevant liver meetings such as ILTS, LiCAGE and ESOT.

Anaesthesia for Major General Surgery & Perioperative Medicine

Guy's & St Thomas' Hospitals

SIA Supervisor: Dr Vedahari Ponnaiah

Email: vedahari.ponnaiah@nhs.net

Background:

- Guy's and St Thomas' is among the UK's busiest and most successful NHS foundation trusts.
- We are a distinguished centre of clinical excellence for both upper and lower GI surgery, gynae-oncology and major urology.
- We are one of the forerunners in robotic surgical practice and we have completed thousands of robotic surgical procedures in all major surgical specialities.
- Our adult anaesthetic services are based at 2 sites.
 - St Thomas' hospital - a busy acute hospital covering general surgical, gynaecology, vascular, trauma and plastics.
 - Guy's hospital - a busy cold hospital covering urology, ENT, thoracics and orthopaedics
- Operating lists will include upper GI, colorectal, urology, gynae-oncology and endocrine surgery.
- Residents can develop individual interests in their chosen specialty and dedicate more time accordingly.

Clinical Aims:

Our post offers residents the opportunity to:

- Lead the delivery of care in this area of anaesthetic practice, to the benefit of both patients and the organisation.
- Assist colleagues in the perioperative planning and management of major cases. This will be delivered through opportunities in our pre-assessment & specialist high-risk clinics and shared decision-making consultations.
- Lead in decision making about the suitability of high-risk patients for surgery by developing expertise in risk assessment and risk communication in shared decision-making consultations and MDT planning.
- Experience a broad range of elective and emergency major procedures in general, gynaecological and urological surgery, including major cancer and intra-abdominal endocrine surgery such as adrenal gland and carcinoid tumours.
- Manage our perioperative services ensuring that the care delivered is safe and timely, benefiting both patients and the organisation, through understanding of risk stratification, optimisation for surgery and most appropriate post-operative destination at both hospital sites.
- Develop and evaluate local services and practice using appropriate QI projects with opportunities to identify and lead on new initiatives.
- Develop, maintain and evaluate partnerships with colleagues in other disciplines, in particular primary care, such as through our multi-disciplinary partnerships for pre operative assessment and preparation.

Provisional Timetable:

	AM	PM	Additional Options
Monday	Upper GI / Colorectal	Major GI / Colorectal	Gynae-Oncology / Major Urology
Tuesday	Upper GI / Colorectal	Upper GI / Colorectal	Gynae-Oncology / Major Urology / Shared decision-making MDM
Wednesday	Upper GI	Upper GI	1 in 4 High Risk Pre-op Clinic
Thursday	Colorectal	Colorectal	Major Urology / POPS Clinic
Friday	Colorectal	Colorectal	Research / Teaching/Training

Academic and Management Aims:

- Participating in or leading current audit and QI projects:
 - PQIP
 - NELA Project
 - Review of ERAS pathways for colorectal cancer and Urology
 - Perioperative pathways
 - Writing, reviewing or updating departmental guidelines and policies relating to major surgery within the trust

Teaching Aims:

- To be a part of the following successful projects currently running:
 - GPC hub
 - TAP Academy
 - Multidisciplinary teaching
 - Help to run a south London regional training day

Anaesthesia for Major General Surgery & Perioperative Medicine

King's College Hospital

SIA Supervisor: Dr Ravi Bhatia

Email: ravi.bhatia@nhs.net

Background:

- King's College Hospital is one of the largest and busiest in London, with a well-established national and international reputation for clinical excellence, innovation and achievement.
- One resident for six-month duration.
- This post provides opportunity for Anaesthetic residents to reach outside of theatres and gain experience of pre-assessment (including specialist HPB and obstetric POA, Colorectal cancer, Vascular MDM), cardiopulmonary exercise testing and working with the PROKARE team (Proactive Review of Older people at King's for Advice and Recovery Evaluation) and attend and present at Perioperative MDT (currently held fortnightly)
- Operating lists will include major general, HPB, urology and endocrine surgery with the option of additional bariatrics and vascular surgery.
- One day a week will be dedicated to audit, research and quality improvement (this needs to be requested in advance)
- Previous projects have focused on the development of ERAS pathways, CPET and the management of pre-operative anaemia and patient pathways for complex co-morbid conditions as well as improving care for high risk emergency surgery
- Perioperative medicine is an expanding field and associated skills are increasingly being sought for substantive consultant appointments.
- The post has an on-call commitment providing senior specialist Anaesthetic cover (adult and paediatric). It has a 1:8 rota; however, there is a provision for alternative cover until 5pm when on a long day.
- **Stage 3 – ST6. ST7:** To be completed alongside a general surgery module. Aim to develop a more in-depth knowledge of perioperative medicine.
-
- <https://rcoa.ac.uk/documents/2021-curriculum-learning-syllabus-stage-3/perioperative-medicine-health-promotion>

Clinical Aims:

- Gain mastery in the delivery of safe and effective perioperative Anaesthetic care to patients undergoing complex intra-abdominal surgery.
- Gain mastery in the management of major abdominal surgical and in doing so demonstrating the necessary multi-disciplinary leadership, communication and team-working skills necessary to ensure the care delivered benefits both the patient and the organization.
- To gain expertise in the clinical management of patients in the preoperative, intraoperative and both immediate and longer-term postoperative periods.
- To develop the expertise to take a lead in decision making about the suitability of high-risk patients for elective and emergency surgery.

Academic and Management:

- To develop the skills required to manage perioperative services, ensuring that the care delivered is safe and timely, benefiting both patients and the organization.
- To develop local services and practice through the use of appropriate quality improvement projects.
- To ensure that perioperative services are fully integrated, consistent, and reliable and make efficient use of resources
- To work effectively in partnership with colleagues in other disciplines, including primary care.
- To assist with NIHR portfolio studies including PQIP.
- To attend and present at national and international conferences e.g. EBPOM.

Teaching Aims:

- To provide multidisciplinary teaching to both peers and POA nursing staff and pharmacists
- To actively participate in the monthly departmental audit programme.
- To undertake an MSc / Diploma / Certificate in Perioperative Medicine.
- To run weekly Perioperative Medicine Journal Club for residents

King's Perioperative Medicine Opportunities:

- General preassessment clinic
 - Tuesdays all day with Dr Phil Found at Camberwell Hub, Preassessment Clinic 240-252 Camberwell Rd. Please see patients face to face and go around the nurses to address their queries. (Feedback for Phil's clinics has been excellent)
- Perioperative MDM
 - Alternate Mondays at 12pm. Link shared on King's Perioperative WhatsApp group or please email ravi.bhatia@nhs.net for link.
- PROKARE team
 - Most mornings they screen and discuss list then split and review patients.
 - Orthogeriatric WR Mon & Thurs am - Dr Dan Bailey
 - Trauma WR tues - Dr Lochrie
 - Contact Dr Nicola Lochrie or Dr Dan Bailey. Meet in Clinical Age Research Unit, Ground floor Cheyne Wing (liver/renal end).
 - Prokare Reg 37870, Prokare CNS 34538
- Acute pain ward round
 - Monday/Tuesday/Wednesday mornings.
 - Meet in the pain nurses office, 1st floor DSU.
 - Email contact catherine.stack@nhs.net
- CPEX clinic
 - Takes place most days.
 - Mixture of liver transplant work ups, pre-op patients and cardiology patients
 - Pre-op Tues pm & Wed am
 - Contact Cardiac Physiologists Nishat Jahagirdar (nishat.jahagirdar@nhs.net) or Eleanor McPhail (eleanor.mcphail@nhs.net)
 - Suite 6, Level 1 Golden Jubilee Wing

- High risk colorectal cancer clinic and MDM
 - Rita assesses the patients remotely and via telephone every week and discusses them every Friday with the surgeons at Colorectal MDM.
 - Please email Rita Agarwala (r.agarwala@nhs.net) in advance for details and try and review and present a patient at the MDM.
- Bariatric anaesthetic clinic
 - Bran Retnasingham (branavan.retnasingham@nhs.net) and Merle Cohen (merle.cohen@nhs.net).
 - Bran does ad hoc clinics remotely. Merle will work on site alternate Mondays afternoons.
- Vascular anaesthetic clinic
 - Kerry Featherstone (kerry.featherstone@nhs.net) and James Hilton (jameshilton@nhs.net) run a clinic on Monday PM and alternate Thursday AM and PM and see high risk vascular patients.
- High risk obstetric anaesthetic clinic
 - Alternates: Monday pm phone clinic and alternate Mondays week face to face in Harris Birth Right with Sarha Nour (10-2pm). Every Friday pm phone.
 - Telephone clinics can be done in department or on labour ward (please contact the consultant leading it to confirm the plan).
 - Anaesthetic lead: Adrian Dabrowicz adrian.dabrowicz@nhs.net
- Neuro pre-assessment clinic
 - Monday & Friday all day.
 - Run by Gowri De Silva (gowri.dezylva@nhs.net), Sarah Muldoon (sarah.muldoon@nhs.net) and Ian Davis (ian.davis5@nhs.net).
 - On site Willowfield 1st floor.
 - Mix of face to face and telephone appointments.
- HPB anaesthetic clinic
 - Tuesday all day.
 - Liver outpatients, 3rd floor GJW.
 - Anaesthetic lead: Derek Amoako (damoako@nhs.net), Tim Hughes (t.hughes1@nhs.net), Amy Dukoff Gordon (amy.dukoff-gordon@nhs.net).
 - Face to face, notes and phone reviews of high-risk patients.

Testimonials:

- “Fellows are exposed to various major high-risk surgical lists, preoperative assessment clinics, CPEX training sessions, PROKARE rounds (elderly care) as part of the rotation and provide valuable insight to perioperative medicine as a specialty. The program provides opportunities to collaborate on research and quality improvement projects and work in a large and friendly department in a truly diverse teaching hospital.”
- “Opportunities to lead service improvement projects and get involved in teaching are abundant, massively supported and encouraged by all team members. I have immensely enjoyed working as the POM/Major- surgery fellow at KCH, it was a very gratifying experience that I can confidently recommend to all trainees.”

Anaesthesia for Major General Surgery & Perioperative Medicine

St George's University Hospital

SIA Supervisor: Dr Liana Geary

Email: Liana.Geary@stgeorges.nhs.uk

Background:

- St George's Hospital is a major teaching hospital in South West London serving a population of 1.3 million.
- Across 29 theatres, we undertake surgery in a large number of specialities including adult Maxillofacial, ENT, Bariatrics, Renal, Gynaecology, Vascular, Ophthalmic, Complex Orthopaedics and Plastic surgery.
- We are a major Trauma centre and tertiary referral centre for Neuro, Cardiac, and Paediatric surgery and tertiary referral centre for the majority of South West London's complex cancer surgery.
- Our centralised preoperative assessment centre has a team of nurses and anaesthetists reviewing around 1,000 patients per month.
- We are working closely with general practitioners from our 6 CCGs to enhance the smooth transition of care from primary to tertiary care.
- We work closely with SW London Elective surgical recovery group and locally with our "POA steering working group" to effectively create a pool of patients ready for their surgeries. Various Peri-operative projects/ Pathways, including Frailty pathway, ASA1 Streaming pathway, Peri-op Anaemia pathway, Prehabilitation project "Get Set 4 Surgery" and Pre-op Diabetes optimisation – IP3D project are running in the department to achieve that.

Perioperative Medicine SIA Module Overview:

Over the 6 months, you will not only gain all of the skills and knowledge you need to demonstrate the key capabilities required for Perioperative Medicine SIA module (specified in the RCOA new curriculum 2021C), but you will also have many additional training opportunities with us to enhance your CV.

Stage 3 Perioperative SIA Learning Outcomes:

- Provides clinical management of patients in the preoperative, intra-operative and both immediate and longer-term postoperative periods independently.
- Is capable of leading the delivery of care in this area of anaesthetic practice, to the benefit of both patients and the organisation

Key capabilities achieved:

Resident will gain experience to:

- Provide an expert opinion in the clinical management of patients during their peri-operative journey.
- Initiate Multidisciplinary decision making about the suitability of high-risk patients for surgery.
- Manage the peri-operative optimisation services, ensuring safe and timely delivery.
- Develop and evaluates local services and practice.
- Ensure fully integrated, consistent, reliable and sustainable Peri-operative pathways.
- Evaluate and present various Peri-operative services outcome data on local, national and international platforms.

Clinical Opportunities:

1. Preoperative assessment:

- Candidate will join the high-risk anaesthetic clinic and be involved with face-to-face patient assessment, using risk stratification (ACS-NSQIP, OS-MRS) tools and will discuss and facilitate peri-operative planning.
- Notes review and POA nursing queries enabling them to understand and manage common clinical dilemmas.
- Gain understanding of the importance of timely identification and optimisation of patients with anaemia, diabetes, malnutrition and frailty.
- Effectively interpreting preoperative investigations, for example Spirometry/ Lung function tests, sleep studies, METs-DASI scoring, normal and stress ECHOs, Ambulatory ECGs for risk stratification and optimisation of patients with complex co-morbidities.

2. Pre-habilitation Services:

- Will be involved in Surgery school sessions educating patients on nutrition, physical activity, lifestyle modulation advice and orientation around Peri-operative expectation. This takes place every Thursday for 2.5hrs.
- Identifying and optimising “At risk Frail and Elderly patient” to improve peri-operative outcome.
- Triaging and transfusing patients for Peri-operative Anaemia Clinics.
- Able to evaluate the Diabetic GIRFT IPD3 pathway impact on patient safety.

3. Multi-disciplinary team meetings:

- Will get an opportunity to attend weekly Bariatric, Renal, Upper and Lower GI, Maxillofacial MDTs according to your interest.

4. Undertaking elective and emergency theatre work:

- Planning and delivering anaesthesia for complex Bariatric/ Upper GI, Lower GI, Breast, Gynaecology, Renal and plastic surgeries.
- Proficient in using of video-laryngoscopy, high flow nasal oxygen, total intravenous anaesthesia, cardiac output monitoring and BIS monitoring.
- Part of the On-Call Rota with opportunities to manage ASA 1-4 patient with case mix of difficult airway, post Bariatric surgery complications etc.
- Opportunity to practice awake fiberoptic intubation, regional blocks, sedation, remote anaesthesia.

QI projects:

- There are many exciting opportunities to get involved in various on-going QI projects:
 - Anaemia and IV Iron Project - Dr Katherine Horner
 - Elderly and Frailty Pathway - Dr Kanchan Patil
 - ASA 1 Streaming project - Dr Liana Geary
 - Early triaging project - Dr Liana Geary
 - Get Set 4 Surgery - Dr Peter Dannat
 - Peri-operative Diabetes Optimisation-IP3D GIRFT project - Dr Kanchan Patil
 - NELA project - Dr Michael Robson

Academic and Teaching opportunities:

- Attending and presenting in weekly mandatory departmental meetings, In-house protected teaching
- Will be encouraged to attend and display Peri-Operative Pathway data in various conferences
- Arranging and teaching various Peri-operative teaching sessions
- Teaching St. George's university medical students and POA nurses

Anaesthesia for Neurosurgery

King's College Hospital

SIA Supervisors: Dr Brenda Nyamaizi

Email: b.nyamaizi@nhs.net

Background:

King's College Hospital's Neuroanaesthetic department is proud to offer a Special Interest Area (SIA) placement in Anaesthesia for Neurosurgery. This SIA can be undertaken as either a 6-month or 12-month placement (whole time equivalent), although we recommend 12 months for those wishing to pursue a post CCT career in neuroanaesthesia.

As the tertiary neurosurgical centre for South East England we perform more than 5000 neurosurgical cases per year, are home to the UK's busiest Major Neuro-Trauma Centre and have an expanding Mechanical Thrombectomy service. We run 5-6 neurosurgical lists per day, covering all sub-specialities of adult and paediatric neurosurgery. Academic members of both the anaesthetic and neurosurgical consultant bodies are passionate about supporting educational and research opportunities relevant to this specialist area of anaesthesia. We have consistently received excellent feedback from Anaesthetists in Training undertaking their rotations in neuroanaesthesia, and are excited to be able to offer this training opportunity for those undertaking Stage 3 of the 2021 Curriculum.

Neurosurgical Sub-Specialities:

- Neurovascular
- Skull base including pituitary
- Complex Spinal Surgery
- Neuro-oncology
- Functional
- Paediatric Neurosurgery
- Interventional Neuroradiology
- GA MRI lists

Advanced Techniques:

- Awake craniotomy
- Intraoperative Neuromonitoring
- Robot assisted neurosurgery
- Minimally invasive spinal surgery with sedation

Non-Clinical Opportunities:

- Pre-operative assessment clinic for neurosurgery
- Quality Improvement opportunities in neuroradiology, neurotheatres and neuro pre-assessment.
- Neurosurgical MDTs
- Neuroradiology MDTs

- Opportunity to spend time with neuroradiology learning interpretation of CT, MRI, Transcranial doppler
- Encouraged to attend national neuroanaesthetic meetings e.g. NACCS Annual Scientific Meeting
- Research opportunities on discussion with academic members of the neuroanaesthetic and neurosurgical teams.
- Manage program of teaching for residents undertaking Neuroanaesthesia as part of Stage 2 Curriculum.
- Opportunity to organize regional South London teaching for Stage 2 and Stage 3 residents.
- Role in Multidisciplinary Simulation teaching program.

Job Description:

- Self-rostering used to allocate shifts on 1:8 WTE neuroanaesthetic registrar rota (Bleep 908), covering out of hours neurosurgical emergency theatre and neuroradiology.
- Autonomy over elective list allocation e.g. prioritise awake craniotomy lists, robot assisted functional lists, neurovascular lists.
- Non-clinical opportunities – pre-operative assessment clinic, radiology, MDTs, weekly neuro specific teaching.
- Educational Development Time – 4hr/week/WTE available as per RCoA guidance, to assist with scheduling of non-clinical opportunities and provide time for associated Educational, QI and Research projects.
- Option to discuss opportunities to “shadow” on the consultant rota in later stages of a 12 month placement.

High Level Outcomes of 2021 Curriculum towards which capabilities can be achieved during this SIA:

- Neuro SIA Capabilities A-F
- Stage 3 General Anaesthesia. particularly Capabilities E,D,F and H
- Stage 3 Generic Professional Capabilities
- Stage 3 Perioperative Medicine and Health Promotion
- Stage 3 ICM
- Stage 3 Resuscitation and Transfer
- Stage 3 Procedural Sedation

Anaesthesia for Neurosurgery

High Level Learning Outcome Stage 3 SIA	Provides safe perioperative anaesthetic care for a wide variety of complex neurosurgical and neuroradiological procedures independently. Is capable of leading the delivery of care in this area of anaesthetic practice, to the benefit of both patients and the organisation.
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Key capabilities	
A	Deliver safe perioperative care to adults requiring elective intracranial surgery both supratentorial and infratentorial including craniotomies for vascular lesions, pituitary surgery
B	Delivers safe peri-operative anaesthetic care to adults for emergency intracranial surgery, CSF diversions, spinal surgery and endovascular thrombectomy
C	Deliver safe perioperative care to adults requiring complex spinal surgery
D	Describes and implements an anaesthetic plan for the complex endocrine and electrolyte disorders that accompany intracranial pathology
E	Analyses the risks and benefits of available anaesthetic techniques for differing neuroscience procedures including TIVA, processed EEG, neurophysiological monitoring, awake testing, and the implications of patient positioning
F	Delivers safe anaesthetic care for neuro-radiological investigations and interventions such as coiling, embolisation and endovascular thrombectomy

Examples of Evidence	Experience & Logbook Preoperative clinic experience and the assessment and optimization of patients presenting for elective neurosurgical procedures. A wide range of elective cases which may include simple and complex spinal procedures, neurovascular procedures (surgical and interventional neuroradiological), other neuroimaging e.g. MRI, trans-sphenoidal cases, neuro-oncology, functional neurosurgery, paediatric neurosurgery and may include awake craniotomies. Perioperative management of emergency neurosurgical presentations which may include decompressive craniectomy, emergency craniotomies, CSF diversion procedures, emergency spinal surgery, urgent neuroradiological procedures such as aneurysm coiling or mechanical thrombectomy, and management of the patient with traumatic brain or spinal injury. Experience may also include neurocritical care, and the resuscitation and transfer of patients with neurological injury or pathology. Supervised Learning Events (SLEs) can be used to demonstrate: Management of any of the above cases. Effective list management of an elective or emergency neurosurgical or neuroradiology session. Pre-operative assessment and optimization of patients with complex neurological needs, for example patients with movement disorders, complex epilepsy, endocrine sequelae of pituitary disease, or with medical comorbidities which may complicate neurosurgery e.g. conditions requiring anticoagulation. Appreciation of the balance between risks and benefits of neurosurgery and anaesthesia in complex or frail patients and ability to work with patients, their families and multidisciplinary colleagues to plan best care. Ability to safely position patients in a variety of positions for surgery and with different equipment, e.g. Prone or Park bench positioning, use of Allan table or Stereotactic or Robotic headframes. Advanced airway management skills relevant to neuroanaesthesia e.g. awake intubation techniques, videolaryngoscopy. Ability to adapt anaesthetic technique to facilitate neurophysiological monitoring, e.g. TIVA anaesthesia and intraoperative neuromonitoring, awake cranial procedures, intra-operative EEG monitoring.
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	Personal Activities and Personal Reflections may include: National and international meetings related to neuro-anaesthesia Presentation at relevant meeting e.g. abstract or free paper Development of neuroanaesthetic or neurocritical care guidelines and policies Leadership of QI projects related to neuro-anaesthesia Attendance at neurosurgical or neuroradiological MDT meetings. eLearning relevant to neuroanaesthesia and neurological conditions. Sessions with radiology learning interpretation of neuroimaging. Participation and leadership in local/regional/national neuroanaesthesia teaching Simulation in neuroanaesthesia and related emergencies. Other evidence Satisfactory MSF
Supervision level	4
Cross links with other domains and capabilities	Stage 3 Perioperative Medicine and Health Promotion, ICM, Resuscitation and Transfer, Procedural Sedation and General Anaesthesia with particular reference to capability E and D, F and H. All Stage 3 GPCs

Anaesthesia for Neurosurgery

National Hospital for Neurology & Neurosurgery Queen Square

College Tutors & SIA Supervisors: Dr Ellie Carter & Dr Lucia Misquita

Email: eleonor.carter3@nhs.net / lucia.misquita1@nhs.net

Background:

- The department provides anaesthesia for the largest number of neurological cases in the UK. Our case mix includes major neurovascular procedures, major spinal surgery, pituitary surgery, surgery for craniocervical disorders, stereotactic surgery, surgery for movement disorders, posterior fossa surgery and surgery for temporal lobe epilepsy. The department supports neurooncology surgery, functional neurosurgery as well complex spinal surgery. Elective patients are supported by a daily consultant led pre-assessment clinic. Intraoperative neuromonitoring is used regularly for both cranial and spine surgery.
- The neurocritical care unit is a tertiary referral centre spread across two floors caring for a large number of patients with brain injuries including stroke (haemorrhagic and thrombotic), subarachnoid haemorrhage and autoimmune neurological pathologies. Experience can be gained in the use of multi-modal neuromonitoring and transcranial doppler.
- There is also a busy Neuroradiology department with interventional neuroradiology (INR), MRI under general anaesthesia and an interventional MRI operating suite. The neuroanaesthesia department also supports a 24-hour mechanical thrombectomy service with the Stroke and INR teams.
- There are six dedicated Neurosurgical Theatres, an Interventional Neuroradiology Department, an MRI, a new Interventional MRI Suite as well as both acute and chronic pain services. The department also provides peri-procedural care for patients undergoing gamma knife procedures.
- This SIA can be undertaken as a standalone 6 month placement (whole time equivalent) or combined with 6 months at St George's Hospital to provide a 12 month (whole time equivalent) SIA training placement in Anaesthesia for Neurosurgery.

Clinical Aims:

- Ability to pre-assess complex neurosurgical patients for elective and emergency surgery.
- Key capabilities (2021 Curriculum):
A & B: Deliver safe perioperative care to adults requiring elective and emergency intracranial surgery
 - Awake craniotomies
 - Sitting craniotomies
 - Trans-sphenoidal surgery
 - Acoustic neuromas
 - Aneurysmal clippings and neurovascular surgery
 - Lumbar drain insertion and surgery for hydrocephalus
 - Emergency decompressive craniectomy

- Experience in high risk pre-operative assessment clinic
- Attendance at neurosurgical MDT meetings

C: Deliver safe perioperative care to adults requiring complex spinal surgery

- Complex lumbar/thoracic/cervical spine surgery
- Thoracic spine surgery with one lung ventilation
- Competence with difficult airways in unstable spine patients
- Emergency decompression of spinal cord

F: Deliver safe anaesthetic care for neuro-radiological interventions

- Endovascular coiling
 - Dural fistula embolization
 - Embolisation of arteriovenous malformation
 - Tumour embolisation
 - Interventional MRI
 - Functional neurosurgery
 - Emergency mechanical thrombectomies
- Experience in NICU with management of:
 - Spinal cord injury
 - Elective and emergency post-operative neurosurgical cases
 - Neurological disease requiring advanced organ monitoring and support.
 - Attendance at neurocritical care MDTs
 - Eventual solo management of neurosurgical lists.

All Stage 3 SIA “Anaesthesia for Neurosurgery” Key capabilities (A/B/C/D/E/F) will be met in accordance with the 2021 Royal College of Anaesthetists Curriculum. The 1-year Special Interest Area training program is also accredited through the International Council on Perioperative Neuroscience Training (ICPNT).

Academic and Management Aims:

- Actively participate in on-going neuroanaesthesia projects
- Complete QI project
- Submit project work to scientific conferences and/or peer-reviewed journals
- Attend national / international neuroanaesthesia meetings
- Neuroradiology sessions with neuroradiologist
- Residents who complete the 1-year SIA will also have the option of completing the International Council on Perioperative Neuroscience Training (ICPNT) accredited neuroanaesthesia program requirements which St George's and NHNN collaborate on. See <https://icpnt.org> for further details.

Teaching Aims:

- Assist in the planning and delivery of local and regional neuroanaesthesia teaching days
- Opportunity to assist with neurosimulation on the NHNN “OneBrain” training course.
- Plan and deliver regular teaching in conjunction with NICU for junior doctors.
- Assist with in house skills courses
- Complete teaching course / train the trainer course

Anaesthesia for Neurosurgery

St George's Hospital

SIA Supervisor: Dr Audrey Tan

Email: Audrey.tan@stgeorges.nhs.uk

Background:

- This post is designed to expose the resident to all aspects of advanced neuroanaesthesia and is of 1 year in length. This will be either 1 year at St George's or 6 months St George's and 6 months Queen Square.
- The Atkinson Morley Neuroscience unit provides a regional neurosciences service for South West London to a population of approximately 3-4 million.
- St George's Hospital is a designated Major Trauma Centre for South West London region.
- The Neuroanaesthesia department has responsibility to four dedicated Neurosurgical theatres, a very active Interventional Neuroradiology Department, a regular MRI list and chronic pain services involving sedation and general anaesthesia.
- The Neuroanaesthesia department provides anaesthesia for major spinal surgery, major neurovascular procedures including clipping of intracranial aneurysm, endoscopic pituitary surgery, craniotomy for various tumours including awake and sitting craniotomy, surgery for cranio-cervical disorders, posterior fossa surgery, epilepsy surgery, emergency neurosurgical cases and paediatric neurosurgery.
- The unit also has comprehensive neuroradiology facilities including CT, MRI and angiography suites for both diagnostic and therapeutic spinal and intracranial interventional neuroradiology procedures. St George's also provides a 24hr mechanical thrombectomy service.
- The Neurosciences Unit is a tertiary referral centre for traumatic brain injury, subarachnoid haemorrhage and ischaemic stroke.
- This SIA can be undertaken as a standalone 6 month placement (whole time equivalent) or combined with 6 months at the National Hospital for Neurology & Neurosurgery, Queen Square to provide a 12 month (whole time equivalent) SIA training placement in Anaesthesia for Neurosurgery.

Clinical Aims:

- Ability to pre-assess complex neurosurgical patients for elective and trauma cases.
- Competence with:
 - Awake craniotomies
 - Sitting craniotomies
 - Trans-sphenoidal surgery
 - Acoustic neuromas
 - Aneurysmal clippings
 - Emergency mechanical thrombectomies
 - Coiling
 - Complex spines and scoliosis surgery
 - Emergency decompressions
 - MRI lists
 - Competence with difficult airways in unstable spine patients
 - Lumbar drain insertion

- Exposure to neuroanaesthesia for paediatrics
- Interventional MRIs
- Functional neurosurgery
- Experience in NICU with management of:
 - Severe traumatic brain injury
 - Spinal cord injury
 - Elective and emergency post-operative neurosurgical cases
 - Neurological disease requiring advanced organ monitoring and support.
- Eventual solo management of neurosurgical lists.

Learning outcomes will meet the requirements of the current Neuroanaesthesia Training Curriculums set by the Royal College of Anaesthetists along with experience in non-clinical domains (Stage 3 SIA).

Academic and Management Aims:

- Actively participate in on-going neuroanaesthesia projects
- Complete QI project
- Submit work to meetings and/or peer-reviewed journals
- Attend national / international neuroanaesthesia meetings
- Neuroradiology sessions with neuroradiologist
- Residents who complete the 1-year SIA will also have the option of completing the International Council on Perioperative Neuroscience Training (ICPNT) accredited neuroanaesthesia program requirements which St George's and NHNN collaborate on. See <https://icpnt.org> for further details.

Teaching Aims:

- Assist in the planning and delivery of local and regional neuroanaesthesia teaching days
- Plan and deliver regular teaching in conjunction with NICU for clinical fellows and junior registrars.
- Assist with in house skills courses
- Complete teaching course / train the trainer course

Anaesthesia for Thoracic Surgery

Guy's and St Thomas' Hospitals

SIA Supervisor: Dr George Christodoulides

Email: g.christodoulides@nhs.net

Background:

The thoracic surgery unit at Guy's Hospital is the largest of 35 thoracic centres in the UK. This is a challenging anaesthesia specialty with many transferable skills, and we love it. The Consultants in the Thoracic Anaesthesia Group at Guy's (TAGG) look forward to welcoming you!

This **Thoracic Anaesthesia Stage 3 Special Interest Area** is suitable for anaesthesia residents aspiring to pursue a career in any of the following:

- Thoracic anaesthesia *
- Major surgery e.g. GI surgery, Neurosurgery, Vascular, Regional Anaesthesia and Pain
- Perioperative Medicine and Enhanced Recovery

Clinical Experience:

This six-month placement at Guy's hospital would present experience in:

- Ventilation techniques for pulmonary surgery:
 - One-lung ventilation (OLV) and managing hypoxaemia
 - Rigid bronchoscopy, high-pressure source ventilation
- Management of complex major surgery
 - Complex elective and emergency surgery:
 - Lung cancer resection: video, robotic-assisted thoracoscopy and open thoracotomy surgery
 - Pleural disease: malignant effusion and invasion, infective disease pleurectomy and bullectomy for pneumothorax, haemothorax, lung biopsy in asleep and awake procedures
 - Multi-specialty resections: Head and Neck, Neurosurgery e.g. giant thyroid, thymus and neurogenic tumours, tracheal resection
 - Interventional radiology - SVC stenting, vascular embolisation
- Difficult airway management (DA and OLV, tracheal stenting and tumour debulking, high pressure source ventilation)
- Pain management and regional anaesthesia:
 - Ultrasound-guided paravertebral blockade, erector spinae blockade
 - Management and prevention of phrenic nerve mediated shoulder pain
 - Prevention of chronic pain
- Preoperative assessment and enhanced recovery
 - Complex comorbidities: COPD, cardiac, difficult airway, co-existent cancer
 - Perioperative planning with surgeons, radiology, ICU, medicine
 - Preoperative assessment surgical clinic - Ms Stephanie Fraser, Thoracic Surgeon.

- Multidisciplinary education
 - One-Lung Simulation Courses (2-3 times a year) – Dr George Christodoulides
 - TAGG (Thoracic Anaesthesia Group at Guy's) meetings (every 2-3 months) – Dr Stuart Marshall
 - Guy's on-call rota workshops for Thoracic Emergencies – Dr George Christodoulides
 - TAP Thoracic for ODPs and nurses – Dr George Christodoulides

Learning Outcomes:

- Provide safe perioperative anaesthetic care for thoracic surgical patients
- Manage thoracic anaesthesia cases independently, with appropriate Consultant consultation

SIA Learning Requirements:

By the end of the SIA placement the resident must demonstrate:

- Experience and logbook:
 - Minimum of 100 cases in 6 months (SIA residents typically achieve 100-150 cases)
 - Demonstrate a wide range of cases: lung resection, mediastinal, chest wall and pleural surgery; thoracic emergencies
- Supervised learning events (SLEs) in
 - Preoperative assessment and case management (A-CEX and CBD)
 - Anaesthetic techniques for surgery: OLV, paravertebral placement (DOPS)
 - Effective list management and leadership (ALMAT)
 - Personal Activities (see below)
- Active participation in personal activities:
 - Responsible leadership role in research and QI projects (A-QIPAT)
 - Attend national and international meetings related to Thoracic Anaesthesia e.g. ACTACC, AAGBI
 - Presentation at TAGG meeting or national / international meeting
 - Contribute to teaching activities

We advise that the resident perform the following SLEs – A-CEX, CBD, DOPS, ALMAT and A-QIPAT – at 2.5 months and then repeat them at 5 months in the placement, to document progress.

* Training Curriculum standards

For anaesthetists intending to undertake Thoracic Anaesthesia as a career, the SIA placement is structured to provide the learning outcomes to comply with:

- **RCOA 2021 Curriculum Stage 3 Special Interest Area: Anaesthesia for Thoracic Surgery**
<https://roca.ac.uk/documents/2021-curriculum-learning-syllabus-stage-3-special-interest-areas/anaesthesia-thoracic>
- **RCOA 2022 Anaesthesia Clinical Services Accreditation (ACSA) Cardiothoracic Standard 5.4.2.1 GPAS reference 18.4.5**
<https://www.roca.ac.uk/sites/default/files/documents/2022-07/ACSA-CARDIO-STDSFULL-2022.pdf>

The ACSA standard states that to undertake anaesthesia for cardiac or thoracic surgery, anaesthetists should have received training to a higher level in cardiac and/or thoracic anaesthesia for a *minimum of one year in recognized training centres*.

Our six-month SIA is dedicated to Thoracics (without the Cardiac component) and has a varied and high case load; the Thoracic Anaesthesia Consultant group consider that it complies with the above standards for Thoracics.

In practice, many of our Thoracic residents remain for a full year in the Trust and combine the SIA in Thoracic Anaesthesia with a further 6 months in Airway, Cardiac or other SIA; several residents have also trained for an additional 6 months at the Royal Brompton Hospital.

Current & Previous Thoracic Projects:

- 2025 **Intraoperative nasogastric tube in robotic thoracic surgery: lower gastrointestinal risk without added respiratory risk**
Volpi S, Patel A, Fabbri G, Smith A, Femia F, Christodoulides G, Johnstone C, Bille A
J Robot Surg 2025, Jun 23;19(1):316
<https://doi.org/10.1007/s11701-025-02458-3>
- 2025 **Management of iatrogenic bronchial tear during OLV for robotic thoracic surgery**
Lee C Y S, Bennett V, Tian S, Femia F, Patel A, Arif F, Christodoulides G
Anaesth Rep 2025, May 14;13(1):e70012
<https://doi.org/10.1002/anr3.70012>
- 2022 **Preoperative paravertebral block in cancer surgery of the lung: ParaSOL a prospective randomized controlled clinical trial. IRAS 244767**
- Chief investigator – Ong C
- Awarded European Society of Regional Anaesthesia (ESRA) Research Grant 2019
- HRA presentation 28th August 2019; HRA and HCRW ethics **19/LO/1334**
- 2022 **Awake thoracic surgery**
Wilson A, Ong C
Second Prize Oral presentation at Association of Cardiothoracic Anaesthetists (ACTACC) 9-10th June Meeting
- 2022 **Multidisciplinary team approach in the management of an obstetric patient with thyroid cancer**
El-Ghazali S, Mirza A, Ong C
Submitted to BJA 26th May 2022

- 2021 **Thoracic anaesthesia: the effect of aerosol precautions during two COVID surges**
Harrison S-L, Christodoulides G, Yusuf H, Edgerton K, Ong C
Poster AAGBI 21st April
- 2021 **Thoracic surgery shoulder pain: significance in postoperative pain management**
Harrison S-L, Edgerton K, Yusuf H, Baldwin M, Ong C
Anaesthesia 2021, 76 (Suppl. 6), 10–88.
<https://doi.org/10.1111/anae.15578>
- 2020 **Tracheal and left bronchial-oesophageal fistula repair and salvage 3-phase oesophagectomy supported by extra-corporeal membrane oxygenation: a case report**
Byrne B, Harrison-Phipps K, Ong C, Hallward G, Shah R, Glover G, Rizzo V, Gossage J
Ann Esophagus 2020;3:40
<http://dx.doi.org/10.21037/aoe-20-43>
- 2020 One-lung ventilation during the COVID-19 pandemic.
Ponnaiah V, Bailey C
Anaesthesia 2020; 75: 1546-1547 <https://doi.org/10.1111/anae.15159>
- 2020 **Tracheal resection: the team brief in multi-stage airway surgery**
Cervi E, Ong C
Anaesthesia Reports 2020 (8) March 2020: 22-25. <https://doi.org/10.1002/anr3.12037>
- 2018 **A Neurogenic tumour of the Posterior Mediastinum: Double the complications**
Abdalla H, Bille A, Ong C
Anaesthesia Cases /2018-0042/ISSN 2396-8397
<http://dx.doi.org/10.21466/ac.ANTOTPM.2018>
- 2016 **Placement of Vivasight Double-Lumen Tube**
Hoogenboom E M, Christodoulides G, Ong C
Anaesthesia Correspondance 2016; 71 (6): 725-726
<https://doi.org/10.1111/anae.13501>
- 2016 **A pilot observational study on the analgesic effect of preoperative paravertebral anaesthesia in lung cancer resection surgery**
Martinoni Hoogenboom E, Reed I, Christodoulides G, Ong C
Association of Cardiothoracic Anaesthetists Spring Meeting, Belfast, June 2016
Third Prize Oral Presentation
Guy's and St Thomas' Hospitals: Anaesthesia Nosworthy prize - Award for Academic excellence
- 2015 **The VivaSight™-DL double-lumen tube with integrated camera: a case series (REC reference:13/NW/0204 IRAS project ID:127436)**
Dean C, Dragnea D, Anwar S, Ong C
Eur J Anesthesiol 2015;32: 1-4.
<https://doi.org/10.1097/EJA.0000000000000361>
- 2015 **Emergency stenting of a severe tracheal stricture: considerations in total airway obstruction and team decision-making**
Christodoulides G, Thomas H, Ong C
Poster Presentation, World Airway Management Meeting (WAMM), Dublin

Anaesthesia for Vascular Surgery

Guy's & St Thomas' Hospitals

SIA Supervisor: Dr Heena Bidd

Email: Heena.Bidd@nhs.net

Clinical Experience:

St. Thomas' Vascular Unit is a busy tertiary and quaternary specialist unit providing great opportunities in elective and emergency Vascular Anaesthesia. There is a vast range of open and endovascular surgeries and procedures in open, hybrid and Interventional Radiology suites, which provides the SIA resident experience in the clinical management of high risk patients with general and regional anaesthesia and sedation techniques. There is an abundance of clinical experiences in major aortic, carotid and lower limb surgery.

Risk Assessment and Joint decision making:

As well as the excellent clinical opportunities, the SIA residents also gain exposure to various clinics and Multi-Disciplinary Team meetings to plan patient care. We work with the peri-operative physicians (the POPS team) to risk assess and jointly plan for the care of this group of high-risk patients. The resident will gain insight into the processes of pre assessment and learn more about peri-operative care of these patients outside of the operating theatre. There is a weekly aortic MDT which give a great insight into the planning for high risk cases.

Pain management and regional anaesthesia:

There is also an opportunity to join pain ward rounds to assess and manage vascular patients with intractable pain from critical limb ischaemia. We have a popliteal nerve catheter service for perioperative management of these patients.

Perioperative Medicine, Prehabilitation, Other QUIPs:

Vascular anaesthesia offers good cross links with perioperative medicine. As well as the MDT and learning opportunities with the POPs team, there are multiple quips and audits related to improving quality of care for high risk vascular patients and perioperative processes.

There is also a great opportunity to take part in multimodal prehabilitation service (colorectal cancer).

Background:

- Guy's & St Thomas' Hospitals.
- In a 4-week period any 2 weeks is largely composed of on-call commitment in our current timetable (on call will be on the 0153 senior ST6/7 rota at St Thomas'). This 2-week timetable thus constitutes a 4-week period of training activity.
- A minimum of 3 lists/week will be consultant supervised.

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1: am	Theatre 5	Endo	Endo (POPS MDM / Aortic MDT)	Theatre 5	Theatre 5/ Join pain round (bleep 1525)
Week 1: pm	POPS clinic / Lower Limb MDT	Endo	Endo	Theatre 5	Theatre 5
Week 2: am	Endo	Theatre 5	Theatre 5	Endo	Prehab meeting 08:30
Week 2: pm	Endo	Theatre 5	Theatre 5	Endo (POPS WR)	Endo / IR

POPS = Peri-op medicine / Theatre 5 = Open surgery / Endo = Endovascular suite / IR = Interventional Radiology

Clinical Aims:

- Gain mastery in the delivery of safe and effective perioperative anaesthetic care to patients undergoing complex vascular procedures [including intra-thoracic], both elective and emergency and in-theatre and in imaging suites.
- Gain mastery in the management of such major cases demonstrating the necessary multi-disciplinary leadership, communication and team-working skills necessary to ensure the care delivered benefits both the patient and the organization.
- Gain maturity in understanding the importance of utilising the time allocated to clinical sessions effectively, optimising throughput whilst not compromising patient safety.
- To be capable of undertaking the perioperative anaesthetic care for a wide variety of complex vascular cases independently; this implies an ability to:
 - Provide peri-operative anaesthetic care to a wide range of cases in and out of theatre [including those where supra-renal or thoracic aortic cross clamping occurs], demonstrating a fundamental understanding of the problems encountered.
 - Show the decision making and organizational skills required of an anaesthetist to manage busy clinical sessions that involve patients having major vascular procedures, ensuring that the care delivered is safe and timely, benefiting both the patient and the organization.
 - To assist colleagues in decisions about the suitability of surgery in difficult situations.

In addition residents may learn about:

- Cardiac output monitoring: Transoesophageal Doppler, LidCO and some TOE.
- Placement of spinal drains.
- Management of major haemorrhage.
- Application and interpretation of peri-operative investigations including stress echo, myocardial perfusion scanning and CPEX.
- Prehabilitation
- Pre/peri/post-op optimisation of the high risk surgical patient.
- Counselling and consenting the high risk surgical patient.

Academic and Management Aims:

- Gains the necessary maturity to guide the choice of Quality Improvement and audit cycles in developing practice.
- To be part of the Prehabilitation team (currently Colorectal Cancer/ Lower GI): attend meetings and data collection.
- Becomes familiar with recent developments in peri-operative anaesthetic care to this area of practice, to evaluate these developments and to advise colleagues of useful changes in practice.
- We would encourage membership of the Vascular Anaesthesia society (VASGBI) who support training and audit and have regular meetings relevant to the specialty.
- Attendance at the annual meeting of the Vascular Anaesthesia society (VASGBI) would be a recommended part of training and additionally external CPD looking at peri-operative care and outcomes e.g. Evidence based peri-op medicine (EPBOM).
- We will agree one audit, one service evaluation project and one research project for the resident to become involved with (ideally this should be discussed before starting the post). These will be drawn from our database of ongoing projects unless the resident has any specific interests they wish to pursue.
- Projects should as a minimum result in poster presentation at a national or international meeting.
- We are happy to support residents wishing to write review articles on topics of interest.
- Opportunities for involvement in service improvement projects and guideline writing can be provided to improve your portfolio in readiness for consultant jobs.

Teaching Aims:

- Organise and lead regional study days
- Organise and lead department Vascular Anaesthesia meetings- and the social event!
- Several postgraduate diplomas exist in peri-operative medicine (e.g. in UCL, Brighton and Guildford) and we would happily support you in these if you wished to pursue them.

Whilst this SIA is offered as a 6 month placement, residents should strongly consider applying to undertake it for a full 12 months, in order to maximise their experience and acquisition of knowledge/skills in both special interest areas of 'Anaesthesia for Vascular Surgery' and 'Perioperative Medicine'.

Anaesthesia for Vascular Surgery

St George's Hospital

SIA Supervisor: Dr Chiara Tosini
Email: Chiara.Tosini@stgeorges.nhs.uk

Background:

- St George's is one of the biggest centres in UK for vascular surgery and is a leading tertiary referral centre for endovascular surgery. A large number of open and endovascular procedures, elective and urgent, are performed at St George's (aortic procedures and endovascular lower limb revascularisations, carotid procedures...), making it an ideal centre for residents looking to gain clinical exposure and experience in managing patients for vascular surgeries.

Aims:

- Building clinical expertise in:
 - Preoperative planning, discussions and optimisation of high-risk patients and patients for major vascular surgery
 - Intraoperative management of patients for vascular procedures with exposure to the following
 - Pain management and the use of regional anaesthetic techniques
 - Management of major haemorrhage (cell saver/ rapid infuser..)
 - Use of advanced cardiac output monitors with / without invasive lines
 - Placement and management of spinal drains
- Developing non-clinical professional competencies
- Academic / Educational development

Clinical Expertise:

The primary aim of this module is to provide ample hands-on clinical experience for the resident to gain confidence in all aspects of perioperative management of the high-risk vascular patient and to be able to manage these cases independently by the end of the fellowship period.

The resident will be allocated to a range of elective vascular lists with a vascular anaesthetic consultant to gain experience in the intraoperative management of patients for a range of vascular procedures. Most vascular cases are carried out in the purpose-built hybrid theatre and a wide variety of cases are anaesthetised and cared for through the week including lower limb revascularisation (endovascular and open), aortic aneurysm (open, EVAR, TEVAR), axillary-femoral bypasses, carotid endarterectomies and limb amputations.

The elective vascular procedures are generally distributed across the week as follows:

Monday	Tuesday	Wednesday	Thursday	Friday
Endovascular Cervical rib excision	Lower limb surgeries (endovascular and open)	Endovascular aortic procedures	Carotid surgery	Lower limb procedures, amputations, Semi-urgent surgeries

The above is subject to change depending on surgeon availability and emergency cases.

Given the nature of vascular pathologies and associated pain issues, there are also ample opportunities for the resident to improve their regional anaesthesia skills through the performance of single shot blocks and insertion of nerve block catheters.

Residents will also be expected to involve themselves in pre-operative care of vascular patients. There are weekly POPS multidisciplinary team meetings that will allow the resident to observe the preoperative assessment and optimisation of vascular patients for surgery with non-anaesthetic colleagues. Residents can also gain perspective into preoperative planning, optimisation and risk discussion for high-risk vascular patients by joining high-risk anaesthetic assessment clinic sessions.

As St George's Hospital is a tertiary referral centre for vascular patients / issues, on-call commitments also provide opportunities for the resident to be involved in emergency vascular procedures such as EVARs for leaking aortic aneurysms, emergency stents for vascular dissections and emergency lower limb revascularisations

Developing non-clinical skills:

Involvement in the MDTs and clinic sessions allows for inter-departmental and multi-disciplinary interactions which in turn will help the resident develop competency in teamwork and collaboration.

The perioperative care of a large number of vascular patients undergoing a variety of vascular procedures will see that the resident also develops skills in high-risk anaesthetic discussions and in perioperative counselling of these patients

On-call work, especially when involving major vascular emergencies will allow for the development of non-technical skills such as prioritisation, team leadership, delegation and communication.

Academic / Education aims:

- It is expected that the resident will help organise and actively participate in the vascular study day for pan-London registrars with the additional possibility of getting involved in teaching preoperative nurses.
- Attendance at the Annual Scientific Meeting of the Vascular Anaesthesia Society (VASGBI) is strongly recommended.
- The resident is expected to be involved in a Quality improvement (QI) project with the aim to present locally/nationally.
- We are also able to provide other learning opportunities for the resident such as:
 - Echo clinics that are run by the cardiologists on a Friday, including simulator training on TTE and TOE run by one of our cardiac anaesthetists.
 - Regional anaesthesia teachings (as part of weekly resident teaching sessions or ancillary RA training days)
 - Simulation sessions for management of emergencies, trauma (including vascular trauma), major haemorrhage etc

This SIA is offered as a 6-month or 12-month placement. Each resident will be assigned an Educational Supervisor (ES) for the duration of their training period and while we will not be carrying out daily assessments, any concerns about your training can be raised with your ES or the module director. We aim to ensure that this training period is a successful and enjoyable one.

Enquiries about the post may be directed to Dr Chiara Tosini (SIA lead) on chiara.tosini@stgeorges.nhs.uk

Obstetric Anaesthesia

Guy's & St Thomas' Hospitals

SIA Supervisor: Dr Neel Desai

Email: neel.desai4@nhs.net

Background:

Hospital:

- St Thomas' Hospital is a large NHS teaching hospital in Central London. Administratively part of the Guy's and St Thomas' NHS Foundation Trust, it provides the location of the King's College London School of Medicine together with Guy's Hospital and King's College Hospital.

The Obstetric Unit:

- St Thomas' Hospital Birth Centre delivers approximately 7800 babies each year. It is a tertiary referral centre and there is hence a high risk case load. The anaesthetic, obstetric medicine and obstetric team work closely together to provide each and every patient with the best possible care. Further, we are a dynamic and motivated team of individuals with both a diverse range of interests that support our obstetric work, including head and neck, regional and vascular anaesthesia, and enthusiasm and interest in the training of our aspiring obstetric anaesthetists.

Timetable:

- The obstetric anaesthetists should expect to work day time (08:00-18:00) and on call (08:00-20:30 and 20:00-08:30) shifts at the Hospital Birth Centre. You will have opportunities to be involved in the anaesthetic high risk clinic, obstetric medicine clinic and the clinical governance and risk management meetings. Moreover, you should expect involvement in audit, management and research initiatives.

One of the strengths of obstetric anaesthesia at Guy's and St Thomas' NHS Foundation Trust is the significant commitment to research and service improvement projects. Given this, there is an expectation that you will work hard in conjunction with your clinical commitments to complete and develop these, with a view to present these at national and international scientific meetings, as well as publish your endeavours in peer reviewed journals.

Clinical Aims:

- Competence and confidence in the anaesthetic and clinical management and prioritisation of a busy and complex tertiary referral maternity unit
- Competence and confidence in the management and running of elective and emergency maternity unit sessions
- Develop independent practice for complex obstetric cases and obstetric list management
- Continue to develop skills in effective communication with the multidisciplinary team, including midwives and obstetricians, and the parturient and her partner
- Attendance at the anaesthetic high risk clinics
- Involvement in anaesthetic assessment and preoperative multidisciplinary team planning for complex deliveries
- Attendance at the obstetric medicine clinics
- Anaesthetic management of the delivery for parturients with placenta praevia and accreta

- Anaesthetic management of the delivery for parturients with moderate and severe cardiac disease
- Competence and confidence in the use of neuraxial ultrasound to facilitate regional anaesthesia in all parturients, including those with obesity and scoliosis
- Competence and confidence in the role and use of other regional anaesthesia techniques such as transversus abdominis plane and quadratus lumborum blocks
- Participate in the on call obstetric rota

Academic and Management Aims:

- Attendance and involvement in clinical governance and risk management meetings
- Conduct and management of audit and quality improvement projects
- Development and writing of departmental guidelines
- Conduct and recruitment of observational studies and trials
- Design, conduct, analysis and reporting of clinical trials and/or literature reviews
- Publication of a letter, case report, observational study, trial and/or systematic review
- Presentation of audit, quality improvement and research endeavours at national and international scientific meetings and publication of such work in peer reviewed journals

Courses:

- You will be encouraged to attend Managing Obstetric Emergencies and Trauma (MOET), Practical Obstetric Multi-Professional Training (PROMPT) and the Obstetric Anaesthetists' Association Three Day Course, but we welcome you to consider other courses specifically relevant to your training in obstetrics

Teaching Aims:

- Coordination, supervision and teaching of more junior anaesthetic residents when managing the maternity unit
- Monthly formal teaching and journal club
- Faculty on the Obstetric Novice Course
- Multidisciplinary teaching at PRactical Obstetric Multi-Professional Training (PROMPT) and simulation training
- Faculty on the Senior Registrar South Thames Obstetric Teaching

Other Activities and Accomplishments:

- One observational study, CLEFT, determining the utility of the intergluteal cleft as a landmark for neuraxial midline identification in obstetric patients, has received a grant and is due to be submitted for ethical approval
- One randomised controlled trial, PRILOCC, comparing intrathecal hyperbaric prilocaine to bupivacaine for cervical cerclage in pregnancy, is ongoing and recruiting obstetric patients
- In 2021, we presented four oral presentations at the SOAP Annual Meeting
- In 2020, we presented seven posters and two best paper oral presentations at the OAA Annual Scientific Meeting
- In 2017, we received recognition for the third best paper at the ESRA Annual Congress
- We have published multiple systematic reviews in regional anaesthesia, obstetrics and uterotonics in Anaesthesia, Anesthesia and Analgesia, British Journal of Anaesthesia Education, Canadian Journal of Anesthesia, International Journal of Obstetric Anesthesia and Journal of Clinical Anesthesia

Testimonials:

- 'I would highly recommend the obstetrics SIA at St Thomas' Hospital. I was involved in the management of several high risk cases, including mothers with cardiac disease, placenta accreta spectrum, and significant airway pathology. There is the unique opportunity to work alongside the maternal medicine team. As well as the clinical experience, you are encouraged to get involved in a range of audit, QI and research work. By the end of my placement, I had several poster presentations at the OAA ASM, had completed the Associate PI scheme for a multicentre research study, and had been actively involved in a RCT taking place at the time. The team are very friendly and approachable, supporting you to get the most out of the placement' – *Matt Sinnott, Previous Obstetric Advanced Trainee*
- I completed the obstetric SIA and had a very enjoyable, varied and educational six months. Clinically I was able to get skilled at ultrasound guided neuraxial anaesthesia, gain experience managing high risk patients, including women with cardiac disease, renal transplants, severe pre-eclampsia and neurosurgical disorders. I attended and ran the obstetric anaesthetic clinic and attended the specialist obstetric medicine clinics which was good experience in helping to understand delivery and anaesthetic planning. There is a balanced amount of supervised and independent working to help refine clinical practice while being able to run elective lists and the labour ward independently. There is always consultant support available, and a very approachable obstetric and midwifery team. There is a multidisciplinary handover in the morning and evening which I really appreciated, making communication within the team easier. I was involved in QI projects, with one presented at the Pan London Audit Network, and I helped write a systematic review. There are opportunities to get involved in multiple projects and many of the consultants have projects in the pipeline. I was also involved in writing and delivering teaching for PROMPT on a regular basis and teaching during the obstetric regional study day and obstetric novice course' – *Jasprit Sidhu, Previous Obstetric Advanced Trainee*

Obstetric Anaesthesia

King's College Hospital

SIA Supervisor: Dr Adrian Dabrowicz

Email: adrian.dabrowicz@nhs.net

Background:

- King's College Hospital NHS Foundation Trust has 5500 deliveries per year, many of which involve mothers or babies at high risk of complications.
- King's NHSFT manages mothers with complex cardiac, neurosurgical and liver conditions as well as undertaking intrauterine surgery. We are also a commissioned centre for placenta accreta spectrum deliveries.
- You will have the opportunity to visit the Harris Birthright Unit (Director: Professor K Nicolaides) which is a tertiary referral centre for foetal abnormalities.

Clinical Aims:

- Providing anaesthesia and analgesia for labour and operative deliveries.
- Learning to run a busy labour ward in a consultant role.
- Learning to manage the Obstetric Anaesthesia Pre-assessment Clinic for women with complex medical problems.
- Attending Obstetric medicine clinics and ward rounds including joint cardiac clinics.
- Attending MDTs with obstetricians/cardiologists/cardiac surgeons/specialist radiologists.
- Management of pregnant women with foetal abnormalities and foetal loss.
- The opportunity to join intrauterine fetoscopic spina bifida repair lists.
- Management of women with abnormalities of placentation (placenta accreta cases).
- Assist in running the Obstetric HDU

Audit / QI / Research / Clinical Governance:

- Participation in the Departmental Audits.
- Attendance at the weekly perinatal meetings, monthly risk management meetings and labour ward forum.
- Opportunity to attend CTG interpretation training.
- Participation in clinical research/audit in collaboration with the obstetric department.
- Dedicated time each week for project/audit work.
- Writing case reports/audits/QI projects with a view to presenting at regional/national meetings.
- **If successful please get in touch 1 month before starting to discuss projects etc.**

Teaching Aims:

- Supervision and induction of SHOs attached to the obstetric unit
- Teaching on PROMPT
- Organise and participate in teaching of topics relevant to pre- and post-fellowship anaesthetic residents within the department
- Education of midwives in analgesic techniques and recognition of deteriorating patients

***** If successful please get in touch 1 month before starting to discuss projects etc. *****

Obstetric Anaesthesia

St George's Hospital

SIA Supervisor: Dr Samuel Kestner

Email: Samuel.Kestner@stgeorges.nhs.uk

Background:

- St George's University Hospitals NHS Foundation Trust is a large teaching hospital in South West London
- You will join a friendly and well supported obstetric anaesthetic department. There is a dedicated consultant rota covering obstetrics out of hours. The consultant group has a wide range of interests which support their obstetric work including cardiac anaesthesia, perioperative medicine, head and neck anaesthesia and quality improvement
- We typically have 2-3 residents doing their SIA for 6 months. There are residents completing other stages of the curriculum including stage 1. You will participate in a 1:8 resident obstetric anaesthesia on call rota
- The obstetric unit is a tertiary referral unit, with > 4500 deliveries per year including a high-risk caseload
- The epidural rate is around 26% and there are > 1000 caesarean sections each year. All women with an anaesthetic intervention are reviewed post-partum in order to monitor outcomes
- Patient experience and choice is particularly important and is highlighted by the '*New Beginnings*' project that utilised experience-based co-design as part of a quality improvement initiative
- Elective caesarean section lists run every morning with a separate consultant anaesthetist, obstetrician and theatre team. All day elective lists run 1-2 times per week
- A joint obstetric and anaesthetic clinic takes place weekly to provide MDT planning for high-risk patients
- We are a referral unit for patients with abnormally invasive placentas and have cohesive MDT links with other members of the theatre team including interventional radiology
- St George's has a fetal medicine unit and the anaesthetic team support in-utero procedures such as fetoscopic laser surgery
- We have an obstetric HDU providing level 1 and some aspects of level 2 care that is jointly managed by the obstetric, anaesthetic and midwifery teams

Clinical Aims:

- Clinical exposure will allow residents to achieve capabilities as outlined in the 2021 curriculum for the stage 3 SIA in obstetric anaesthesia
- Provision of safe perioperative care for a wide variety of complex obstetric cases including:
 - anaesthetic management of delivery for parturients with co-morbidities including congenital cardiac diagnoses and neurological or haematological disease
 - anaesthetic management of delivery for parturients with abnormal placentation including use of interventional radiology
 - anaesthetic management of delivery for bariatric parturients
 - care for parturients requiring peripartum HDU care, including support of the MDT in delivery of safe HDU care

- Gain experience in the leadership of delivering patient care in a busy delivery suite (level 4 supervision) with a view to working as an obstetric consultant anaesthetist in a tertiary unit or as a generalist covering obstetrics at a district general hospital
- Attend the obstetric and anaesthetic high-risk clinic
- Attend fetal medicine clinics with Professor Asma Khalil
- Develop an understanding of obstetric management decisions via daily teaching ward rounds
- Provide supervision and mentoring for more junior anaesthetic colleagues (recent introduction of stage 1 residents to the rota)

Academic and management aims:

- Attend CTG meetings, maternity governance meetings and maternity audit and guidelines meetings
- Attend and present at the joint anaesthetic and obstetric M&M meetings
- Design and conduct QI projects for presentation locally and nationally. A recent SIA resident has led on introducing fibrinogen concentrate onto delivery suite to optimise MOH management
- Write departmental guidelines and implementation. A recent SIA resident has recently updated the remifentanil PCA SOP
- Present posters/oral presentations at national scientific meetings. At the OAA ASM in Birmingham (May 2024), a recent SIA resident won a poster prize for their work on the new delivery suite safety huddle and another group of recent SIA residents had their poster recognised during the 'pick of the posters' session
- Publish case reports

Teaching Aims:

- Attend and join the faculty for PROMPT course within the St George's simulation centre to promote MDT learning
- Organising 'in-situ' obstetric simulation on delivery suite
- Supervision of more junior anaesthetic residents
- Midwifery teaching including remifentanil PCA and competencies for HDU midwives

Testimonial from resident who completed their SIA (ATM) in 2022:

St George's obstetric anaesthesia department is an inspiring place to train. It has a high caseload of complex women, a dynamic and committed specialist consultant body and a cohesive MDT. I really enjoyed the formal opportunities for learning like the joint anaesthetic/maternal medicine high-risk clinics, but the day-to-day experience from the MDT ward rounds hugely improved my understanding of obstetric and midwifery decision making. The HDU is also a highlight and shows how level 2 peripartum care can be delivered in-situ whilst keeping women feeling safe and in control of their delivery. I was fully supported in QI projects and teaching, and this has led to being invited to join the review panel on a national inquiry into maternity care, as well as changes to local care pathways and presentation submission to conferences.

Paediatric Anaesthesia

Evelina London Children's Hospital Guy's & St Thomas' NHS Foundation Trust

SIA Supervisor: Dr Paul Stevens

Email: paul.stevens25@nhs.net

Background:

- Evelina London Children's Hospital (ELCH) is one of the two specialist children's hospitals in London. Although the doors of the new purpose-built building opened in 2005, Evelina London's history dates back to 1869.
- ELCH is part of Guy's and St Thomas' NHS Foundation Trust and provides teaching hospital facilities for London South Bank University and King's College London School of Medicine.
- Evelina also provides specialist services for heart and lung conditions at Royal Brompton Hospital.
- ELCH provides comprehensive health services from before birth, throughout childhood and into adult life with a vision to be a world leading centre of life-changing care for children, young people and their families.
- Based in a stunning purpose-built building at St Thomas' hospital, ELCH includes:
 - 215 inpatient beds, including 30 intensive care beds
 - 46-cot neonatal unit
 - 6 operating theatres and 2 catheter lab, plus 2 cardiac theatres in East Wing, St Thomas'
 - a full children's imaging service with 2 MRI scanners, x-ray and ultrasound
 - Stand-alone Day Case Unit with two operating theatres.
- ELCH provides care for over 104,000 families a year and is the first children's hospital in the UK to be rated as 'Outstanding' by the Care Quality Commission.
- The Paediatric Anaesthetic Group at ELCH has 35 consultants who between them provide approximately 10,000 Anaesthetics every year. Just less than half the patients are under the age of five and 200 are neonates. There is a large cardiac surgery service including cardiac MRI and catheter lab. Other services include cleft, nephro-urology (including renal transplantation), ENT (including specialist airway surgery), orthopaedic/spinal, ophthalmic, dental surgery and neonatal surgery as well as thoracoscopic procedures and laparoscopic surgery.
- Anaesthetic services include a Pre-assessment Clinic and an Acute Pain Service.
- Evelina PICU is the lead centre for paediatric intensive care in the south-east region and home of the South Thames Retrieval Service (STRS), a transport service for all critically ill children south of the river Thames. STRS receives over 1,800 referrals a year, moves around 900 children between hospitals and provides training and simulation courses to partner hospitals. PICU has approximately 1200 admissions per year of which 40% are cardiac.
- ELCH has one of the largest neonatal units in England, caring for 1,000 babies a year and providing 5,000 intensive care days. NICU is co-located with maternity services at St Thomas' and provides specialist care for babies with complex problems (including cardiac, surgical & neurological conditions).
- We are pioneering new techniques using imaging to diagnose congenital heart defects and catheter interventions to treat them. We're the 2nd largest centre for children born with a single ventricle and have the 3rd largest children's cardiac surgical programme in England. Our 'world firsts' include the MRI-guided children's heart valve procedure.
- Working with our urology and bladder services, we are the primary transplant and dialysis centre for a

population of over 9 million people. Our patients have won the British Transplant Games 'Best Kidney Team' for 8 of the last 11 years.

- We also provide surgery for insertion of deep brain stimulators as part of complex motor /neuro disability service.
- Our busy Emergency Department receives around 24,000 visits from children per year under the age of 17 years.

Clinical Aims:

- We have 6 advanced/SIA training posts of six months duration.
- *The overall clinical aims are to:*
 - Gain confidence in managing a wide range of complex Paediatric surgical cases, including managing sick premature neonates for surgery, as well as children and neonates with complex co-existing diseases for surgery.
 - Be able to communicate effectively and compassionately with children and young people, parents/carers and with the paediatric medical teams.
 - Be able to utilise time allocated to paediatric sessions effectively without compromising safety.
 - Be able to lead the paediatric multidisciplinary team and work effectively as a team member.
 - Become familiar with issues of child protection and consent.
 - Be able to do appropriate lists independently (with distant supervision) by the end of the training.
 - There is also the potential to gain some experience in the management and transfer of critically ill children. The South Thames Retrieval Service is run by our PICU and shadowing the retrieval team may be possible with prior arrangement.

Academic and management aims:

- You are expected to take part in an audit/quality improvement project during the six months and will be e-mailed within the first few weeks of starting regarding available projects.
- You are expected to present the project at one of the anaesthetic and/or Evelina hospital forums.

Teaching:

- *Educational Meetings* – These are held weekly.
- *Perioperative M&M Meetings* – These are held quarterly from 8-9 am.
- *GSTT educational website* – This is updated regularly with information about all anaesthetic educational activities in the trust (<http://www.gsttanaesthesiaedu.com>).
- *Simulation*- regular paediatric Skills and Simulation which is a full day multidisciplinary course.

Testimonials:

- "Very friendly, happy place to work. Have felt very supported and been able to build my skills and confidence. So glad I have done this ATM, while aware that 6 months isn't enough to transform into a paediatric anaesthetic expert I feel much more capable with small and sick children. Thank you to all!"
- "On-call: the consultants were very supportive during on calls, never had any problems getting in touch with anybody"
- "I felt I have achieved what I have aimed to achieve in terms of clinical experience and competencies during my 6 months placement. I have gained good paediatric experience with ample case mix, clinical supervision, confidence in anaesthetising young children with distant supervision and increased knowledge in paediatric anaesthesia."

Paediatric Anaesthesia

King's College Hospital

SIA Supervisor: Dr Sarah Nour

Email: sarah.nour@nhs.net

Background:

- King's College Hospital is one of London's largest and busiest teaching hospitals. The hospital has dedicated paediatric services and a substantial paediatric anaesthesia workload.
- As a tertiary, national and international referral centre for antenatal diagnosis and treatment of congenital abnormalities, there is a significant caseload of sick term and pre-term neonates requiring surgery.
- King's College Hospital is also world famous for its hepatobiliary unit and is the largest Liver transplant centre in Europe. We are UK's largest Paediatric liver transplant centre and King's does the largest number of Kasai procedure in infants. The transplant unit also undertakes small bowel transplantation in children.
- Our regional Neurosurgical centre carries out complex elective and emergency procedures in neonates and children. We have started intrapartum repair of meningocele.
- King's is a major South Thames Trauma Centre and we receive paediatric trauma as well. Our paediatric workload is also contributed by Maxillofacial, Orthopaedics, Paediatric Dentistry, Paediatric Respiratory and Gastroenterology department, Intervention Radiology and Imaging Department and Ophthalmology department.
- The surgical workload is supported by a Level 1 neonatal intensive care unit and a paediatric ITU and HDU. These units also admit medical emergencies from the South East region.
- The anaesthetic department has 12 Paediatric Anaesthesia Consultants who cover most of the Paediatric surgical workload with contributions from other anaesthetists who cover sub-speciality work.

Training objectives:

- To achieve competency in identifying and managing a sick child.
- To acquire perioperative management skills for elective and emergency surgery, from very pre-term neonates to older children with concomitant complex diseases.
- To encourage supervision of junior residents.
- Understand the concept of electrophysiological monitoring in operating on neuro pathologies and the use of total intravenous anaesthesia in such cases including neonates.
- Understand the concept of one lung anaesthesia in children and management of Thoracoscopies.
- Master the techniques of difficult airway management in children.
- To develop management skills leading a multi-disciplinary team and the carers and parents.
- To understand the concept and legality of consent as applied to children.
- Be familiar with issues of child protection.
- Be able to do appropriate lists independently by the end of the training.
- To grasp the importance of multi-modal perioperative pain management in children.

Clinical Experience:

- Supervised lists in the operating theatre
- During the 6-month period, the resident will aim to have anaesthetised 200 elective and emergency cases. These are to include:
 - 60 cases aged 1-5 years
 - 35 cases less than 1 year old, including neonates.
- Anaesthetising for 4-5 lists a week can provide this caseload. This will be in line with Royal College of Anaesthetists guidelines.
- The resident will also be involved with the emergency management of paediatric cases.
- **Intensive Care Medicine:**
 - The resident is required to spend some sessions attached to the Thomas Cook Intensive Care Unit.
 - The amount of time the resident wishes to spend here can be variable and should be discussed in the initial and midterm meeting with the Education Supervisor.
- **Paediatric Pre-assessment:**
 - We encourage the resident to attend the general pre-assessment clinics, Dental and Day Surgery clinics and MRI pre-assessment clinics.

Clinical meetings:

- There are weekly general surgery planning meeting, combined morbidity and mortality meeting, grand rounds and department research meeting. We encourage the residents to take part in these.

Audit and Teaching:

- The resident is expected to complete an audit/QI project relevant to paediatric anaesthesia and to present the data at an audit meeting.
- The resident is expected to attend and take part in the department twice monthly journal clubs and audit meetings.
- The resident is encouraged to attend courses, meetings of paediatric interest and study days within the Thames Paediatric Anaesthesia Group.
- The resident will have opportunities to involve in aspects of research and to teach other health care professionals and supervise junior residents.

Testimonials:

- Now Paediatric Consultant at King's – "for me it is the broad range of pathologies we see and are regularly exposed to; neuro, liver, thoracic paediatric cases as well as the trauma which can be quite complex. Done total of 195 patients during ATM including 14 neonates, 24 under 1, 84 under 5 and 73 under 15 during ATM period".
- Now Consultant at King's with special interest in Paediatrics, and actively involved in teaching – "Total of 518 paediatric cases including 13 neonates, 66 less than 1 year, 185 less than 5 years, 267 less than 15. 189 inhalation inductions, 19 arterial lines, 24 central venous lines, 23 caudal epidurals".

Paediatric Anaesthesia

St George's Hospital

SIA Supervisor: Dr Thomas Breen

Email: thomas.breen@stgeorges.nhs.uk

Background:

- St George's is a 1300 bed hospital serving a local population of 1.3m across SW London and a Tertiary Referral centre covering an area including Surrey, Sussex and Kent, serving a total population of around 3.5m.
- We are a Paediatric Major Trauma Centre.
- We provide anaesthetic services for over 5000 paediatric cases per year.
- St George's has a dedicated PICU & Paediatric Step-Down unit admitting around 600 critically ill children every year into 10 + 5 intensive care beds.
- The St George's NICU has 43 intensive care beds and is a Lead Centre for the South London Neonatal network.

Clinical Opportunities:

- The aim of the SIA in Paediatric Anaesthesia at St George's is to build on previous paediatric experience to increase both competence and confidence in anaesthetising children.
- The post will be of 6 months duration designed to expose the resident to all aspects of paediatric and neonatal anaesthesia.
- Residents will be supported to build their confidence in the independent management of all age groups and surgical sub-specialities and will be encouraged towards the endpoint of practicing paediatric anaesthesia independent of supervision.
- The post would be suitable for those wishing to take up a Lead Paediatric Anaesthetist post in a DGH or as a steppingstone to further experience in paediatric anaesthesia.
- St George's has training opportunities in numerous surgical specialities including: Paediatric neurosurgery, plastics, neonatal, ENT, dental, max-fax, ophthalmic, orthopaedics, general, urology, trauma and day surgery specialities
St George's is a specialist centre for spinal deformity surgery and for paediatric oncology surgery, and for specialist fetal surgery such as EXIT procedures.
- There is opportunity for exposure to remote location anaesthesia for specialities such as radiology and gastro-enterology.
- Residents will be expected to participate in the Anaesthetic on-call rota in both adult and paediatric anaesthesia.

Academic & Management opportunities:

- The Paediatric Department is active in audit and QI and there are usually opportunities to get involved on a local or wider scale. We have a strong history of poster presentations at the APAASM & WSM.
- We are active members of the London Neonatal Anaesthetic Network and the pan-London Thames Paediatric Anaesthetic Group and have input into APA Meetings in London. Residents will be encouraged to attend Local & National meetings relevant to paediatric anaesthesia.
- All residents are expected to maintain appropriate Life Support accreditations and there are opportunities to update qualifications in APLS/EPALS with an encouragement to obtain instructor status.
- St George's is pro-active in supporting educational activity and senior residents are allocated designated SPA time for approved academic activities.

Teaching opportunities:

- SGH has regular paediatric teaching sessions for both internal and regional residents which those residents undertaking our paediatric anaesthesia SIA will be encouraged to assist with and participate in.
- There will be opportunity for involvement in simulation training specifically for paediatric anaesthesia and trauma.
- Residents will be encouraged to participate in teaching and training junior colleagues.

Paediatric Anaesthesia

Great Ormond Street Hospital for Children – 6 month SIA

College Tutors & SIA Supervisors: Ellen Rawlinson & Jamuna Navaratnarajah

Email: ellen.rawlinson@gosh.nhs.uk / jamuna.navaratnarajah@gosh.nhs.uk

Background:

- Great Ormond Street Hospital for Children NHS Trust (GOSH) is a national centre of excellence in the provision of specialist children's health care, currently delivering the widest range of specialist care of any children's hospital in the UK. It is the only specialist Biomedical Research Centre for paediatrics, the largest centre in the UK for children with heart or brain problems, and the largest centre in Europe for children with cancer. It works in partnership with the UCL Institute of Child Health (ICH), part of University College London, and together they form the largest paediatric research and teaching centre in the UK. The hospital at Great Ormond Street is the only exclusively specialist children's hospital in the UK and it covers all specialties except Burns and Liver Transplantation. There are many opportunities for research and academic teaching. The hospital receives over 275,000 patient visits (inpatient admissions or outpatient appointments) a year and carries out approximately 19,000 operations each year. The hospital has 389 patient beds, including 48 intensive care beds.
- At present, we have 30 residents at any one time, the majority of whom are appointed for 1 year. Posts are rotational appointments from all Schools of Anaesthesia within London and the East of England.
- The rota has 2 tiers and is based on a 1:10 to 1:12 on call which ensures very good support (2 residents present on site out of hours) when on call and huge opportunity for daytime working on elective lists with Consultant supervision.
- The Association of Paediatric Anaesthetists of Great Britain and Ireland website has lots of useful resources about training in paediatric anaesthesia (<http://www.apagbi.org.uk>).

Clinical Aims:

- GOSH is a tertiary referral hospital, dealing with complex children with multiple comorbidities. Paediatric anaesthesia is a consultant led service and residents should expect a high level of direct supervision especially in the first few months of their time at GOSH. With time and with appropriate backup by consultants, residents will be allowed to assume the role of lead clinician for some elective lists and emergency work by the end of the 6-month placement.
- Modular training is provided throughout the 6-month SIA to ensure training time on elective lists covering blocks in each surgical specialty for those seeking a career in a DGH or hospital with minimal paediatrics but where stabilisation of the sick child is essential. The 6 month SIA will ensure a broad basis of paediatric anaesthesia including neonates, difficult airway, general surgery, urology, plastics, renal, ENT, neurosurgery and all emergency work. This is individually tailored to each resident with some provision for additional training in areas of specific interest towards the end of the 6 months.
- Provided Stage 1 and 2 aims have been met prior to joining us the resident will find the 6 month post will provide a high standard of training in specialist peri-operative, intraoperative and post-operative care providing them with the skills, confidence and framework to anaesthetise a child in both elective and emergency situations.

Following completion of the 6 month SIA the resident would be expected to be able to:

- Provide safe perioperative anaesthetic care for a wide variety of paediatric procedures performed in the DGH environment independently.
- Provide safe anaesthesia in both the emergency and elective setting utilising techniques to reduce anxiety in all ages.
- Deliver safe perioperative care to all paediatric patients requiring surgery in a district general setting, including those with complex co-existing disease.
- Gain arterial, intraosseous, peripheral and central vascular access in children and babies.
- Use a wide range of analgesic strategies peri-operatively including simple regional techniques for surgeries routinely performed in a district general hospital setting.
- Manage massive transfusion in children.

Academic and Management Aims:

- You are expected to take part in at least one audit/QI project during your time here and present at least one anaesthetic academic breakfast meeting.
- You will find that all the consultants in the department encourage residents with project ideas. Funding may be available for projects.
- Annual Research Prize for Anaesthesia Residents:
 - The aims of the prize are to recognise, encourage and reward excellence in non-clinical work performed at Great Ormond Street Hospital by residents.
 - Eligible projects are: Original Research, Reviews, Audit, Surveys, Case Reports or Series, and Letters.
- Attendance at study days, courses and appropriate regional, national and international meetings related to paediatric anaesthesia (including those of the Association of Paediatric Anaesthetists) is encouraged.

Teaching Aims:

- Protected anaesthesia teaching includes:
 - Weekly one-hour breakfast meeting. The programme includes presentations by residents, morbidity meetings, department audit, journal club and presentations by guest lecturers.
 - There is a two-hour programme of tutorials for anaesthesia residents twice a month.
 - Weekly 30 minutes 'Cardiac Building Blocks' teaching lead by Dr Lucy Hepburn (paediatric cardiac anaesthetist) and 1 month a year 'Paediatric anaesthesia Building Blocks' led by senior Trust Fellows.
 - Protected teaching time and a programme of tutorials for those residents rotating to intensive care.
- There is a departmental WhatsApp Journal Club that everyone is welcome to contribute to. Residents are asked to present and appraise a paper.
- There is a small departmental library and a larger library in the Institute of Child Health.
- There are many other teaching sessions available to employees in the Trust coordinated by the Postgraduate Medical Education department. Information is widely available in the Trust intranet. Look out for Grand Rounds, Building Blocks sessions, ICU, Respiratory and Cardiac teaching sessions, trust based and London Deanery Education courses.
- The GOSH Clinical Simulation Centre offers a wide range of multidisciplinary courses for all healthcare professionals both clinical and non-clinical including the Managing Emergencies in Paediatric Anaesthesia (MEPA) course. Dr Linda Chigaru (CATS and Anaesthetic Consultant) is the Education Lead for Clinical Simulation and Dr Pratheeban Nambyiah (Consultant Anaesthetist) is the Educational Lead for Simulation Development.
- You are encouraged to attend educational meetings and reasonable requests for funding are likely to be met.

Paediatric Anaesthesia

Great Ormond Street Hospital for Children – 12 month SIA

College Tutors & SIA Supervisors: Ellen Rawlinson & Jamuna Navaratnarajah

Email: ellen.rawlinson@gosh.nhs.uk / jamuna.navaratnarajah@gosh.nhs.uk

Background:

- Great Ormond Street Hospital for Children NHS Trust (GOSH) is a national centre of excellence in the provision of specialist children's health care, currently delivering the widest range of specialist care of any children's hospital in the UK. It is the only specialist Biomedical Research Centre for paediatrics, the largest centre in the UK for children with heart or brain problems, and the largest centre in Europe for children with cancer. It works in partnership with the UCL Institute of Child Health (ICH), part of University College London, and together they form the largest paediatric research and teaching centre in the UK. The hospital at Great Ormond Street is the only exclusively specialist children's hospital in the UK and it covers all specialties except Burns and Liver Transplantation. There are many opportunities for research and academic teaching. The hospital receives over 275,000 patient visits (inpatient admissions or outpatient appointments) a year and carries out approximately 19,000 operations each year. The hospital has 389 patient beds, including 48 intensive care beds.
- At present, we have 30 residents at any one time, the majority of which are appointed for one year. Posts are rotational appointments from all Schools of Anaesthesia within London and the East of England
- The rota has 2 tiers and is based on a 1:10 to 1:12 on call which ensures very good support (2 residents present on site out of hours) when on call and huge opportunity for daytime working on elective lists with Consultant supervision.
- The Association of Paediatric Anaesthetists of Great Britain and Ireland website has lots of useful resources about training in paediatric anaesthesia (<http://www.apagbi.org.uk>).

Clinical Aims:

- GOSH is a tertiary referral hospital, dealing with complex children with multiple comorbidities. Paediatric anaesthesia is a consultant led service and residents should expect a high level of direct supervision especially in the first few months of their time at GOSH. With time and with appropriate backup by consultants, residents will be allowed to assume the role of lead clinician for simple elective lists and emergency work by the end of the 6-months and more complex lists by completion of the 12 month post.
- Modular training is provided throughout the 12 month SIA to ensure training time on elective lists in all of our surgical specialties including cardiac, spines and craniofacial. The 12 month SIA will ensure specialist training in all areas of paediatric anaesthesia except liver transplant. The modular training we provide is individually tailored to each resident with some provision for additional training in areas of specific interest towards the end of the 12 months.
- Provided Stage 1 and 2 aims have been met prior to joining us the resident will find the 12 month post will provide a high standard of training in specialist peri-operative, intraoperative and post-operative care providing them with the skills, confidence and framework to anaesthetise a child in all elective and emergency situations.

At the end of the 12 month post the resident will have the skills to:

- Provide safe perioperative anaesthetic care for a wide variety of paediatric procedures performed in the DGH environment independently.
- Provide safe anaesthesia in both the emergency and elective setting utilising techniques to reduce anxiety in all ages.
- Deliver safe perioperative care to all paediatric patients requiring surgery in a district general setting, including those with complex co-existing disease.
- Gain arterial, intraosseous, peripheral and central vascular access in children and babies.
- Uses a wide range of analgesic strategies peri-operatively including simple regional techniques for surgeries routinely performed in a district general hospital setting.
- Manages massive transfusion in children.

In addition, the 12 month SIA will provide opportunity for the resident to be able to:

- Provide safe perioperative anaesthetic care for a wide variety of complex paediatric (including neonates) surgery and other procedures independently.
- Be capable of leading the delivery of care in this area of anaesthetic practice, to the benefit of both patients and the organisation.
- Deliver safe perioperative care to all paediatric patients requiring surgery in tertiary paediatric setting including those with complex co-existing disease.
- Use a wide range of analgesic strategies peri-operatively for complex paediatric patients requiring major surgery.

Academic and Management Aims:

- You are expected to take part in at least one audit/QI project during your time here and present at least one anaesthetic academic breakfast meeting.
- You will find that all the consultants in the department encourage residents with project ideas. Funding may be available for projects.
- Annual Research Prize for Anaesthesia Residents:
 - The aims of the prize are to recognise, encourage and reward excellence in non-clinical work performed at Great Ormond Street Hospital by residents.
 - Eligible projects are: Original Research, Reviews, Audit, Surveys, Case Reports or Series, and Letters.
- Attendance at study days, courses and appropriate regional, national and international meetings related to paediatric anaesthesia (including those of the Association of Paediatric Anaesthetists) is encouraged.

Teaching Aims:

- Protected anaesthesia teaching includes:
 - Weekly one-hour breakfast meeting. The programme includes presentations by residents, morbidity meetings, department audit, journal club and presentations by guest lecturers.
 - There is a two-hour programme of tutorials for anaesthesia residents twice a month.
 - Weekly 30 minutes 'Cardiac Building Blocks' teaching lead by Dr Lucy Hepburn (paediatric cardiac anaesthetist) and 1 month a year 'Paediatric anaesthesia Building Blocks' led by senior Trust Fellows.
 - Protected teaching time and a programme of tutorials for those residents rotating to intensive care.
- There is a departmental WhatsApp Journal Club that everyone is welcome to contribute to. Residents are asked to present and appraise a paper.

- There is a small departmental library and a larger library in the Institute of Child Health.
- There are many other teaching sessions available to employees in the Trust coordinated by the Postgraduate Medical Education department. Information is widely available in the Trust intranet. Look out for Grand Rounds, Building Blocks sessions, ICU, Respiratory and Cardiac teaching sessions, trust based and London Deanery Education courses.
- The GOSH Clinical Simulation Centre offers a wide range of multidisciplinary courses for all healthcare professionals both clinical and non-clinical including the Managing Emergencies in Paediatric Anaesthesia (MEPA) course. Dr Linda Chigaru (CATS and Anaesthetic Consultant) is the Education Lead for Clinical Simulation and Dr Pratheeban Nambyiah (Consultant Anaesthetist) is the Educational Lead for Simulation Development.

Regional Anaesthesia

Guy's and St Thomas' Hospitals

SIA Supervisor: Dr Amit Pawa (Clinical & Educational Lead for Regional Anaesthesia)

Email: amit.pawa@nhs.net

Background

- Guy's and St Thomas' NHS Foundation Trust
- 1-2 SIA residents per 6-month rotation
- We have a department with an international reputation for excellence in Regional Anaesthesia experience, education and research and a keen and enthusiastic group of consultants ready and willing to teach
- SIA Residents will be placed on "regional anaesthesia lists" across both hospital sites and will be supernumerary initially

Specific resources:

- Regional Anaesthesia Training Hub – Sponsored by GE Healthcare – room dedicated to regional anaesthesia SIA residents for training and education (needling phantoms, high fidelity "Valkyrie" Phantoms provided by GE Healthcare, RA equipment and dedicated Ultrasound machine and scanning couch)
- Access to dissection lab for prosected anatomy specimens (on request)
- 2 x Handheld VScan Ultrasound Machines available for use
- 2 x VR Headsets available for use in lieu of sedation on regional anaesthesia lists
- iPad Apps – essential anatomy, complete anatomy, visible body
- Specialist societies recommended to join: RA-UK, ESRA
- Dedicated SIA resident teaching sessions by Dr Amit Pawa within first 2 months to cover all essential regional anaesthesia techniques

Clinical Aims

- Initially will be supernumerary on "regional lists," however, as training proceeds, you will also be expected to run some lists independently to utilise your list management skills, and we specifically aim for you to be able to run an all-day awake upper limb list independently by the end of the SIA.
- General on-call commitment comes with the post
- At the end of the 6 months you should have broad experience in regional anaesthesia, being able to undertake procedures without supervision and be confident in performing and teaching these skills:
 - *Upper limb Regional anaesthesia:*
 - Interscalene, Superior Trunk, Supraclavicular, Cervical plexus, Infraclavicular & Axillary Brachial Plexus Blocks, plus distal forearm blocks.
 - *Lower limb regional anaesthesia:*
 - Femoral/Fascia Iliaca (Infra and supraumbilical), Popliteal and Proximal Sciatic, Adductor Canal, Genicular nerves, IPACK, Ankle blocks

- *Trunk/paravertebral blocks:*
 - Lumbar Neuraxial scanning, ESP, InterTransverse Plane blocks, Paravertebral blocks, Interpectoral and Pectoserratus blocks (formerly PECS2), Serratus and Parasternal Intercostal plane blocks, Rectus Sheath, TAP, Quadratus Lumborum Blocks (QLB).
- *Continuous Catheter Techniques:*
 - We have significantly increased the provision of Nerve catheters where indicated, and as RA SIA residents, you will have the opportunities to gain confidence with these techniques and teach others.
- It is expected that the Regional Anaesthesia SIA residents will understand and appreciate the common anatomical variations associated with neurovascular and musculoskeletal structures of the upper and lower extremities

To cross reference with the Royal College of Anaesthetists 2021 Curriculum learning syllabus: stage 3 special interest areas:

<https://rcoa.ac.uk/documents/2021-curriculum-learning-syllabus-stage-3-special-interest-areas/regional-anaesthesia>

Special Interest Area Residents in regional anaesthesia will be able to achieve the key capabilities below:

- **A** - Can independently practice safely a wide range of regional techniques for all upper limb and shoulder surgery under block alone, including the management of continuous nerve catheters for post-operative analgesia
- **B** - Can independently practice safely a wide range of regional techniques for lower limb surgery, including the management of continuous nerve catheters for post-operative analgesia
- **C** - Can independently practice safely a wide range of regional techniques for chest and abdominal wall surgery
- **D** - Ability to independently organise, lead and evaluate the effectiveness and efficiency of an operating list planned under regional anaesthesia alone
- **E** - Supervises and advises colleagues on the suitability and delivery of regional anaesthesia in complex cases
- **F** - Can evaluate the place of regional anaesthesia, and any developments, within the patient perioperative pathway and advise on potential changes in practice

To support this learning please also refer to the RA-UK Curriculum resources to be found here:

<https://www.ra-uk.org/index.php/education/rcoa-2021-curriculum.html>

Academic and Management Aims:

- You should use E-learning resources, books and journals to supplement your learning and aim to be knowledgeable in:
 - Clinical and surface anatomy relevant to Regional Anaesthesia
 - Drugs and equipment used in regional anaesthesia – including latest innovations
 - Physics related to use of ultrasound in regional anaesthesia
 - Recent articles relating to new techniques/current trends in regional anaesthesia
 - Regional Anaesthesia Podcasts such as “Block It Like It’s Hot”
 - Current practice of ultrasound-guided regional anaesthesia

- Complete an audit linked to specialist area – many on-going audits and quality improvement projects ready to go with the consultants involved in Regional Anaesthesia
- SIA Residents should make the most of opportunities for oral and poster presentations at RAUK, ESRA and Association of Anaesthetists annual conferences. We will expect that at the end of the SIA, you will have:
 - Submitted an abstract for oral or poster presentation at a national meeting
 - Submitted a letter or case report for publication in a peer reviewed journal
 - Taken part in one of the on-going pieces of research, or, contributed to a review article or original article.
 - Considered the option of sitting the European Diploma in Regional Anaesthesia (EDRA), or undertaking modules from the Masters in Regional Anaesthesia
 - Review, revise and create Trust guidelines on regional anaesthesia

Educational Aims

- You should use your study leave entitlement for national and international meetings devoted to regional anaesthesia and ultrasound
- Utilise opportunities to support various Regional Anaesthesia courses around the country as support faculty
- Contribute to informal teaching other residents/consultants
- Teach and help coordinate “sono-club” teaching sessions via our RA training Hub
- Assist in creation/development of on-line tutorial resources for RA

Regional Anaesthesia

King's College Hospital

SIA Supervisor: Dr Yousif Ali

Email: yousif.ali2@nhs.net

Background:

- King's College Hospital is one of four major trauma centres in London
- It offers excellent training opportunities to ST6/7s undergoing SIA placements due to the blended nature and acuity of the clinical workload
- Main site is Denmark Hill with opportunities to attend Orpington hospital – our satellite unit that conducts high-volume orthopaedic cases
- One SIA position available of 6 months' duration (whole time equivalent)
- The aim of this module is to prepare the resident for taking on the responsibility of becoming a consultant with a specialist interest in Regional Anaesthesia
- On-call commitment (699 bleep - Senior registrar / team leader) provides exposure to trunk blocks and catheters (rectus sheath / serratus anterior / ESP) as well as providing assistance to colleagues for performing blocks in theatres and ICU

Clinical opportunities

- 2 Trauma theatres on main site
- High-volume day surgery theatre for orthopaedics (DSU 7)
- Orpington orthopaedic hospital – 4 operating theatres
- Hepato-biliary theatres (main site) – opportunity to perform thoracic epidurals or chest-wall catheters whilst managing major hepato-biliary cases
- Vascular lists, including AV fistula lists requiring brachial plexus blocks
- 2 eye theatre lists in day surgery
- Regional anaesthesia catheters on CEPOD
- Managing major trauma cases - especially during out-of-hours on-call duty, working with ICU to cover ED traumas

Clinical Aims:

- Become proficient in performing and teaching a wide range of blocks, including brachial plexus blocks, lower limb, trunk and chest wall blocks
- Gain skills in managing awake / sedation and GA block lists independently
- Become skilled in placing and managing regional anaesthesia catheters
- Gain ophthalmic anaesthesia skills including sub-tenon and peri-bulbar eye blocks
- Become fluent in neuraxial scanning and be able to perform the paramedian approach to spinal and epidural placement

Clinical Expectations:

- Initially working in supernumerary capacity on lists with regional anaesthesia but would be expected to run regional anaesthesia lists independently
- Develop and hone list management skills as work patterns moves towards having more distally supervised lists
- Actively seek block opportunities throughout theatres to maximise exposure and practice
- By the time of completion there should be broad range of regional anaesthesia skills, be able to undertake procedures and demonstrate ability to perform RA without supervision, and be confident in teaching these skills to both junior and senior clinicians

Academic and Management Aims:

- Complete quality improvement project related to regional anaesthesia
- Opportunity to develop evidence-based RA guidelines for the trust
- Expected to complete project and submit at least 1 abstract for oral/ poster presentation at RA-UK/ ESRA meeting
- Encouraged to seek post-graduate qualifications- EDRA or Diploma/Master in Regional Anaesthesia
- Management training: King's offers a free, three-stage management and leadership course for senior registrars transitioning to consultant
- Opportunity to shadow the medical director for hands-on management experience
- 4 hours per week of Educational Development Time is available on request to facilitate achievement of these aims

Teaching Aims:

- Active role in setting up/running workshops for erector spinae plane block/ serratus anterior plane block for rib fracture management in the trust
- Monthly teaching for anaesthetic residents; hands-on regional workshop with live demonstration of sonoanatomy, opportunity to practise needling with Blue Phantom model, run-through of RA kit used at King's – all supported by regionalist consultants

Regional Anaesthesia

Kingston Hospital

SIA Supervisor: Dr Ram Kumar

Email: ram.kumar2@nhs.net

Aims:

- To develop a well-rounded clinician with a specialist interest in regional anaesthesia.
- The resident will develop a broad range of regional anaesthetic skills and techniques and develop the ability to manage regional anaesthetic lists independently by the end of six months. They will also gain advanced skills such as regional anaesthetic catheter insertions and will be experienced with a wide variety of regional blocks.
- There will be opportunities to participate in and implement quality improvement changes, which link into the professional domain objectives of the RCoA curriculum. There will also be a significant involvement with education and training in regional anaesthesia within the trust and regionally.

Knowledge:

- The resident will be encouraged to gain membership with regional anaesthesia societies including ESRA, RA-UK and LSORA and will be expected to keep up to date with the latest developments, discussions and guidelines in regional anaesthesia.
- We will suggest and provide resources including important articles and recommended websites, apps, textbooks and YouTube videos.

Skills and Clinical Exposure:

- There will be at least 2 days a week of dedicated and specific regional anaesthetic lists. The majority of other allocated lists will have a regional anaesthetic component. Initially, the resident will be supernumerary on these lists but as skills and expertise develop, the resident will be able to manage regional anaesthesia lists independently with supervision. There is a dedicated block room in the day surgery where regular hand and shoulder lists take place.
- **Upper limb**
 - Most patients on hand lists have their surgery awake under regional anaesthetic blocks. We have regular shoulder surgery lists where interscalene or suprascapular blocks are routinely performed.
- **Lower limb**
 - We have regular lower limb lists where blocks are encouraged for knee, ankle and foot surgery. We encourage lower limb blocks in our trauma lists, which have a high preponderance of lower limb cases.
- **Truncal blocks and Catheter service**
 - There are regular breast oncological lists where PECS, serratus blocks, Erector Spinae blocks or Paravertebral blocks are done routinely. We provide a fracture rib analgesia service where parasternal, serratus and erector spinae blocks are frequently delivered, and catheters are inserted for

these patients. We regularly perform abdominal fascial plane blocks for major abdominal surgery procedures and hernia procedures.

- **Trauma**

- Our all-day trauma lists are busy with a high proportion of high-risk patients where regional anaesthetic blocks are encouraged.

Quality Improvement and research:

- There are significant opportunities to help develop our regional anaesthetic services, with ongoing projects and those that are yet to be developed. The projects will entail close collaboration with our acute pain services and our emergency department. Some of our ongoing projects include:
 - Assessing breast analgesia outcomes following blocks
 - Assessing and improving upon our fracture rib analgesia catheter service
 - Continued development of our fascia iliaca block service in the emergency department and fascia iliaca catheter service.
 - Development of our regional anaesthesia database
- We encourage innovation and poster presentations to either national or international meetings from completed projects.
- We are happy to negotiate supporting professional activity time for audit and research work as long as the clinical objectives according to the curriculum are on course to be met.
- We are currently rolling out an e consent process through out the trust. The resident will be encouraged to help with this role out.

Training and Education:

- We have plans for our inaugural ultrasound regional anaesthesia course for acute and chronic pain. The resident can help with the organization and teaching in this course.
- The resident will help organize and deliver our fortnightly departmental ultrasound sonoclub sessions under supervision from consultants with an interest in regional anaesthesia.
- In order to develop our fracture rib analgesia and fascia iliaca block services there will be the opportunity to deliver training and education to our Emergency Department colleagues in the form of one-stop regional anaesthesia session.
- We are open to further innovative ideas to enhance the training and education of our regional anaesthesia services in the hospital.

Guidelines and Policies:

- The resident will be encouraged to develop guidelines and policies in regional Anaesthesia, under consultant supervision, where appropriate.

Regional Anaesthesia

St George's Hospital

SIA Supervisor: Dr Ralph Zumpe

Email: ralph.zumpe@stgeorges.nhs.uk

Background:

- St George's Hospital
- 6-month whole-time equivalent post working alongside an established clinical fellowship programme
- Minimum of three sessions per week dedicated to lists where regional anaesthesia is performed
- Six days allocated to regional anaesthesia lists at Epsom Orthopaedic Centre (SWLEOC, supernumerary training)
- Regular training sessions on soft cadavers and anatomical specimen
- Regional Anaesthesia Consultant body skilled in a wide range of regional anaesthesia including catheter techniques
- In-patient pain rounds and chronic pain interventions can be included in the programme
- Major Trauma Centre
- Easy access to St George's University of London's Dissecting Room
- Opportunities to get involved in Medical Simulation & in Undergraduate Teaching

Clinical Aims:

- In the beginning of your SIA, you will be directly supervised. As you gain experience, you will be expected to work with only distant supervision.
- With increasing skill level, your block repertoire will extend. You should be able to reach an appropriate number of cases in a wide spectrum of regional anaesthesia.
- You are encouraged to take initiative and look for other block opportunities if there are none on your list.
- After assessment, you will carry a dedicated bleep to facilitate flexibility and to respond to requests for regional anaesthesia.
- You will be expected to provide Serratus Plane, Fascia Iliaca and Sciatic Catheter Service.
- You should always consider the option of regional anaesthesia in appropriate clinical contexts.
- You will gain list management skills in preparation for a consultant post towards the end of the unit.
- The St George's Special Interest Area (SIA) Regional Unit allows the resident to acquire sound technical skills and confidence in performing most common upper & lower limb blocks as well as trunk regional anaesthesia. Provided you show initiative and dedication, you will be well prepared for either a Consultant post in a major referral centre, or to act as a lead in a smaller unit.
- The post comes with on-call commitment, usually on the obstetric or general on-call rota.

Academic and Management Aims:

- Over the course of the module, you should achieve sound knowledge on relevant anatomy and sono-anatomy, recognition of anatomical variations, pharmacology and physiology, through your clinical practice and independent study.
- You should stay up-to-date with current practice and trends of ultrasound-guided regional anaesthesia, nerve stimulator and pressure monitoring.
- You will complete an audit or quality improvement project as part of the advanced module, and you may be involved in some of the ongoing research projects within the department. We would encourage you to attending a major meeting to present your work.
- Our regional anaesthesia fund bursary supports resident's presentations and attendance of national and international meetings.
- Presentation of interesting cases, audit or QI-project at department morning meeting is possible.
- Residents are encouraged to become members of ESRA/ RA-UK/ LSORA.

Teaching Aims:

- Residents will be part of our Regional Anaesthesia Faculty, facilitating our St George's Regional Anaesthesia Courses, South-Thames Regional Study Days, etc.
- Residents are expected to become anatomy demonstrators for undergraduates.
- Residents are expected to facilitate our Sono-Club and in-house teaching, as well as to informally teach anaesthetic colleagues.

Other:

- We will support you in obtaining EDRA and other postgraduate qualifications.

Testimonials and Accomplishments:

- Past residents have regularly presented their work at conferences such as ESRA, RA-UK and BSOA.
- Past projects included successful introduction of infraclavicular brachial plexus, quadratus lumborum and serratus plane blocks, sciatic catheters post amputation, patient satisfaction and outcomes in regional anaesthesia.
- There are also numerous on-going projects which residents can get involved with.

Trauma and Stabilisation

King's College Hospital

SIA Supervisor: Dr James Saffin

Email: jsaffin@nhs.net

Background:

- King's College Hospital is the Major Trauma Centre for South East London, Kent and Medway (The SELKaM Trauma Network).
- There are approximately 2200-2400 trauma team activations per year (including approximately 240 paediatric and 250 HEMS trauma calls).
- The trauma team is led 24/7 by a multidisciplinary group of Anaesthetists, Intensivists and Emergency Medicine Consultants.

The Anaesthetic SIA in Trauma and Stabilisation:

- Clinical Experience in Anaesthetic and Critical Care management of Major Trauma patients from reception and resuscitation through to theatre and the Intensive Care.
- The ability to lead the trauma team, be it in Resus or the Operating theatre, while providing safe and effective care to multiply injured patients is a key learning outcome of the SIA. King's offers ample opportunity to develop skills and knowledge in leading the trauma team in a supportive and safely supervised environment.

'809' ITU Senior Registrar On-Calls:

- The service provision component of the SIA is to the Critical Care Department with the SIA resident participating in the 809 Senior Critical Care Resident rota.
- The 809 role is resus facing and while also being the primary airway doctor for Major Trauma Calls, they will also be expected to deal with level 2 and level 3 critical care referrals from patients in resus.
- As a busy hospital with approximately 90 adult HDU/ITU beds, they will also be expected to support (where necessary) the inward facing ITU SpR who covers the wards and may need to support Critical Care units when required.
- Following Induction and a period of familiarisation (tailored to the experience of the resident), they will be expected to work their LD / Nights in this role. Clinical supervision in this role is provided by the iMobile (Critical Care Outreach) Consultant.

Standard (normal working days) are for SIA-related activity

- Exposure to the management of major trauma as part of the trauma team is guaranteed as part of this role leaving standard days available for more focused / supernumerary SIA-related activity.

Major Trauma Meetings and Education:

Title	Description	Frequency
Major Trauma Morning Meeting	Review images, admissions and Major Trauma referrals from across network with a Consultant Radiologist covering the previous 24 hours	Daily (24/7. 365 Days a year) 0830 – 0900
Major Trauma M&M	Review of mortality and code reds over previous month	Every 2 nd Thursday. 0930 – 1200
Major Trauma Education and Research	Presentations, guest speakers, research review	Every 1 st Thursday. 0930 – 1200
Major Trauma Performance and Outcomes	Review MTC performance against London and National Metrics	Every 4 th Thursday. 0930 – 1200
Major Trauma Radiology Teaching	A review of some interesting images with a Consultant Radiologist	Every 1 st and 3 rd Thursday. 1230 – 1330

- There is an ongoing schedule of multidisciplinary meetings, weekly radiology meetings, mortality and morbidity, CPD and business meetings.
- SIA residents are encouraged to attend to further their knowledge and understanding of the wider structure and management of the major trauma service and the networks within which it operates. Teaching and education sessions relating to trauma radiology (*Trauma Radiology 101*), TARN and others can be arranged.
- We have facilitated residents to attend Major Trauma courses and training at some of our sister Trauma Centres.
- We did our first In-Situ Simulation *From Street to Theatres* (receiving a REBOA patient), involving London air ambulance, the Emergency Department and Theatres (with involvement from Major Trauma Surgery, Vascular) and King's Simulation team in December 2024; we are planning to make this happen on a regular basis on different themes, and the Trauma Anaesthetic fellow would be a key person in facilitating this.

Procedural skills:

- Competencies can be gained in Chest drain, Trauma line insertion, regional blocks for thoracic analgesia and you will be signposted to cadaveric courses with opportunity to observe and receive training in surgical procedures such as emergency thoracotomy and damage control surgery.

Teaching:

- The SIA resident will facilitate the local Trauma Skills Course aimed at giving residents in EM/Anaesthesia/ITU a solid grounding in the management of major trauma.
- There are ad-hoc opportunities for multi-disciplinary teaching, including foundation doctors, nursing staff and critical care paramedics.
- The SIA resident is likely to be involved in the formal education programs run by the Anaesthetic and Critical Care Departments.
- There is a trauma-team course (KITTS- King's Integrated Trauma Team Simulation) run regularly at the trust, SIA residents are strongly encouraged to attend and subsequently instruct / facilitate on the course.

Theatre lists:

- A wide range of elective surgery takes place at King's and the anaesthetic department can facilitate list allocation to further particular skills and related interests.
- Previous residents have gained experience in trauma-related skills such as MaxFacs (airway management and fiberoptic intubation), HPB (major bleeding) and Orthopaedic trauma (regional anaesthesia and analgesia).

Quality Improvement and Service Development:

- The major trauma service at King's is well developed but welcomes residents with service improvement ideas. Support will be given to develop these and to attend meetings/relevant committees as required to implement change. There are also opportunities to be involved with the trauma and critical care networks of which King's is part.
- Examples of recent areas residents have worked on are: Human factors around Emergency Department Intubation, Rib fracture analgesia, The hospital 'Code Red' massive transfusion policy.

Trauma and Stabilisation

St George's Hospital

SIA Supervisor: Dr Ali John Watts

Email: ali.watts@stgeorges.nhs.uk

Background & Clinical Aims:

- St George's is the South West London Major Trauma Centre, one of four MTCs serving the London Major Trauma System (LMTS), as well as the South West London and Surrey Major Trauma Network (SWLSMTN) receiving 150-200 cases by air per year from various pre-hospital third sector charity air ambulances including London Air Ambulance, Kent Surrey and Sussex Air Ambulance and Essex and Herts Air Ambulance. London Ambulance Services also deliver Major Trauma patients, often supported by Advanced Paramedics Practitioners (APP), whom often go through an AP MSc. at St George's University.
- These patients routinely have injury severity scores greater than 15 with a proportion requiring in flight transfusion and being classified as Code Red or Neuro protective strategies and classified as Code Black. Road traffic collision remains the most common mechanism of injury leading to complex injury patterns sites of injury from blunt force trauma.
- As a result St George's offers excellent exposure to major trauma both within the emergency department and theatre environment. ED trauma calls are predominantly led by ED consultants with an interest in trauma and several of the consultants are also KSS LAA and EHAAT pre-hospital doctors. There is opportunity to undertake the trauma team leader course which is run in-house and then do sessions in the ED doing supervised trauma team leading which is a key capability of the trauma special interest area.
- Major Trauma Directorate (MTD) Governance enables bi-weekly review of cases, caseload audit and both professional and service development. Opportunities are abundant including participation in governance presentation, MTD weekly trauma teaching, anaesthetic trauma teaching, Major Incident drills, contribution to the quarterly Major Trauma newsletter, support with quality improvement projects of your own design.
- Clinical skills exposure to trauma lines, chest drains, management of thoracotomy, trauma laparotomy, balancing damage control surgery v damage control resuscitation, massive transfusion in code red patients,, chest wall blocks will be developed alongside non-technical skills used in managing complex time-critical multi-disciplinary Resus or theatre environments.

- All Key capabilities of the SIA will be covered:

Explains and acts within the multidisciplinary nature of trauma care from pre-hospital to rehabilitation
Can lead the trauma team from arrival in hospital to definitive investigation and management for all critically ill trauma patients
Can lead triaging of trauma patients
Explains the structure and setup of trauma services and trauma databases
Delivers a detailed explanation of and has the ability to contribute to major incident planning

- Paul Calvert theatres are the main trauma and orthopaedic theatres. Experience that can be garnered here varies from the acute surgical management of code red trauma through to elective and urgent orthopaedics and orthopaedic trauma.
- St George's is the tertiary referral centre for all complex trauma in the region and the elective work also by its nature is either complex surgery, a high-risk patient or both.
- All facets of orthopaedics are covered including upper and lower limb trauma, pelvic and spinal surgery. There is also extensive opportunity for developing regional anaesthetic skills in upper and lower limb blocks, central neuraxial blockade and chest wall blocks. Interested in regional or not it is wise to keep a regional portfolio and one would expect to be able to administer a significant number of Serratus Anterior and Erector Spinae catheters for regional anaesthetic infusion.
- Outside of Paul Calvert theatres, St George's is able to offer opportunities in a variety of anaesthetic sub-specialties. According to individual need time can be arranged in other theatre areas, for example thoracics and vascular which can complement major trauma experience.
- From an educational perspective there will be opportunity to teach on local and regional trauma study days and participate in audit and quality improvement.

Academic and Management Aims:

- There will be opportunity to participate in and lead audit and quality improvement projects. It will be encouraged to attend pre-hospital governance days, national conferences, study days and major trauma meetings.

Teaching Aims

- There will be opportunity to teach on local and regional trauma study days
- The Major Trauma directorate's weekly inter-professional trauma teaching brings together colleagues from across the trust and enables an appreciate if the huge amount of cross-specialty and multi-disciplinary input these patients will experience on their recovery journey. There is ample opportunity to contribute to teaching and learn in this forum.
- Due to links with St George's University of London MSc programme, there is opportunity to contribute to teaching on the APP program as well as support of these clinicians in theatre.
- Major Trauma SIA residents support the Major Incident cross-departmental monthly drills and contribute to the debrief and teaching that results in system development and hospital education.

Management and Professional and Regulatory Requirements

Guy's & St Thomas' Hospitals

SIA Supervisor: Dr Joe Lipton
Email: josephsamuel.lipton@nhs.net

This 6 month (WTE) SIA, the first to be offered within the Generic Professional Capabilities Domains, offers a unique opportunity to work alongside senior healthcare leaders in South-East London, to improve perioperative care for patients, through system-wide collaboration, pathway redesign and transformation.

Successful applicants will join the **South-East London Anaesthesia and Perioperative Medicine (APOM) Network board**: the body that links perioperative care provision for the three acute Trusts in the South-East London system. They will work on a range of impactful project streams, helping support the aims and objectives of the network. The Network's aims for 2024/25 are shown below (these may change during the period following application:

SE London Anaesthetic Network Priorities

1) Pathway improvement (pre-op, intra-op and post-op)

- a) Scoping and designing standardised and digital innovation solutions for pre-operative risk stratification / early screening
- b) Development and implementation of 'green/gold 'light touch' pathway' for POA fit patients accessing elective surgical hubs
- c) Deep dive analysis on postponements and on the day cancellations to understand and develop associated improvement action plan
- d) Implementing 'wait-well' website to SEL
- e) Implementation & monitoring of 'NOAH principles'
- f) Implementation & embedding of DreAming
- g) Supporting the development of intra-op protocols/ patient communications with surgical teams to implement new day case pathways

2) Efficiency and workforce planning

- a) Resident engagement in mentored lists
- b) Training and development of POA nurses
- c) Training capacity assessment and development of remedial action plan
- d) Scope and co-design solution for how we involve residents in POA clinics
- e) Involvement in further development of CESR programme

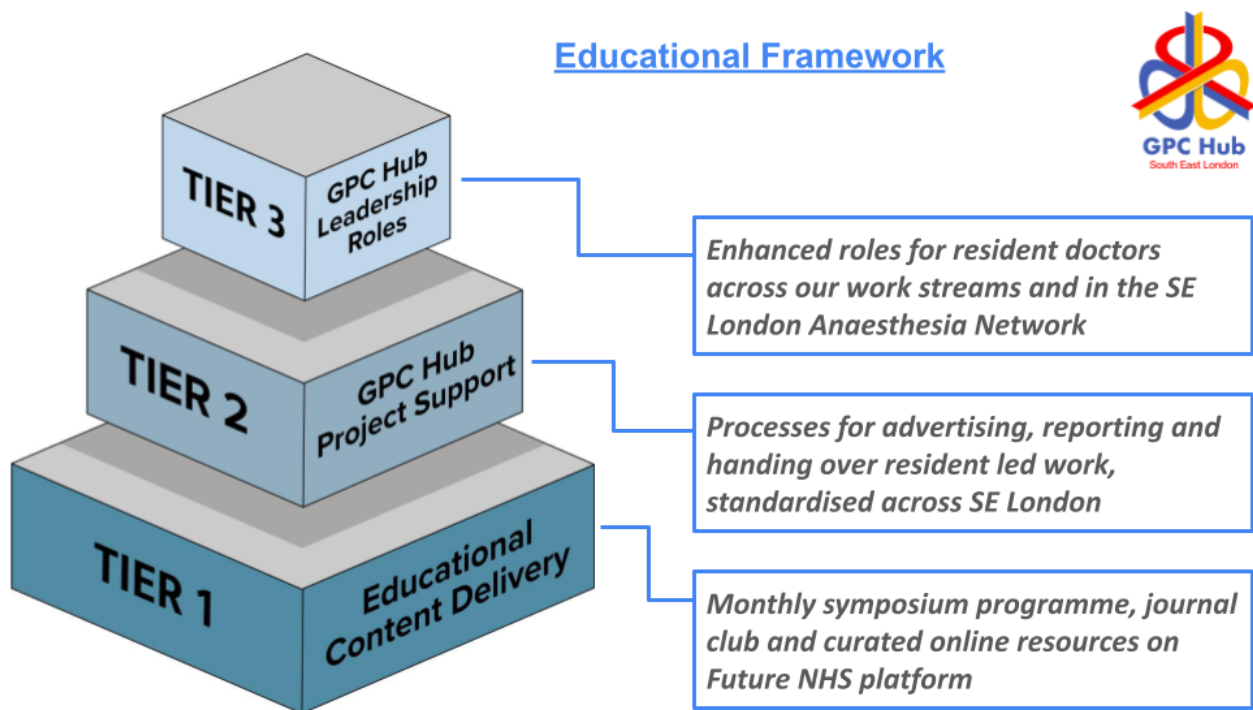
3) Sustainability

- a) Facilitate SEL sustainability group
- b) Implementation of oral paracetamol pre med
- c) VL v DL project
- d) Removal of Nitrous and desflurane SEL project

Generic Professional Capabilities Hub:

The Generic Professional Capabilities Hub is the educational framework associated with the South-East London Anaesthetic Network. It was devised at Guy's & St Thomas' to support achievement within the non-clinical domains of the 2021 Curriculum, for Anaesthetists in Training and Locally employed doctors pursuing CESR.

The Hub addresses core non-clinical workstreams, including Quality Improvement, Clinical Governance, Research, Medical Education and Sustainability, working locally within Trusts and, where possible enabling collaboration across the South-East School of Anaesthesia. The Hub offers opportunities for all, tailored to capacity and other commitments, as outlined below:



SIA Learning Outcomes:

This SIA will provide ample opportunity to meet the higher learning outcomes stipulated by the RCoA:

- Understands and undertakes managerial & organisational roles at Trust/Health Board, Regional and National levels
- Demonstrates leadership in the planning and development of a project involving change or transformation.

Expected areas of activity:

- Resident doctor representation for Guy's & St Thomas' Trust at South-east London Anaesthesia Network Board.
- Working with Residents from other South-east London Trusts to ensure dissemination of best practice and equitable access to learning opportunities.
- Resident lead for one or more project workstreams aligned to the Network's strategic priorities.
- Working with senior Medical, Nursing and Operational leaders across the south-east London system to achieve project aims.
- Preparation of proposals and project presentations for network board and local leadership sign off.
- Working through the GPC Hub network, and with local resident leads, to support engagement from Anaesthetists in Training, Locally Employed Doctors and SAS Doctors.
- Assisting with the building and maintenance of the GPC Hub Future NHS workspace.
- Mentorship of more junior colleagues through project work and educational initiatives.
- Clinical commitments covering senior resident Anaesthetic rota at Guy's & St Thomas' sites (0153/1049 bleep holder)

Additional learning and development opportunities:

- Participation in the GPC Hub resident leads development course, delivered in association with the Faculty of Medical Leadership & Management
- Participation in the South-east London Anaesthetic Network Excellence Award Scheme
- Opportunities for local, regional and national presentation and publication of work
- Depending on applicant preferences and local availability, there may be the opportunity to extend the post from 6 to 12 months, with the second half as Out of Programme Experience

Appendix

Scoring Matrices

Anaesthesia for Patients with Complex Airway

Score	Personal Statement
0	Not answered, or fails to make any mention of airway management.
1 to 5	- Only a few sentences. - Airway management mentioned, but does not fully outline why this sub-speciality is of interest or what future plans would be on completion of SIA. - No evidence of DAS membership.
5 to 10	- A brief paragraph. - Limited mention of previous exposure, but nothing done to highlight achievements or further interest in airway management beyond what any other Stage 2 resident will have achieved. - Limited understanding of the additional skills & knowledge required for advanced airway management. - Future plans in relation to advanced airway management unclear. - Evidence of DAS membership.
10 to 15	- Reasonably well-structured statement. - Examples given to highlight interest or achievement in airway management beyond typical Stage 2 experience (attendance at conferences, non-mandatory CME i.e. not mandatory study days with airway topic). - Shows some understanding of what airway anaesthesia management entails, especially with shared airway and advanced airway techniques. - Gives some indication of what an airway SIA would help them achieve in their career plans. - Evidence of DAS membership.
15 to 20	- Very well structured. - Several or significant examples given that demonstrate interest or achievement beyond stage 2 experience (e.g. prize winning presentation, regional/national relevant project). - Shows insight into what airway management entails and their role in the wider MDT in a major H&N centre. - Highlights the skills they feel they can bring to the SIA (clinical and non-clinical). - Demonstrates they are patient focused. - Clearly outlines how an SIA in Airway management will impact future career. - Provides evidence of attending at least one DAS ASM.

Score	Supporting Information (i) Teaching / Training, (ii) QI / Research, (iii) Management / Leadership
0	Question not answered or totally irrelevant.
1 to 3	- Only offers one or two examples. - Examples are historical e.g. medical school/foundation level.
4 to 6	- Has a few recent examples. - Activities are not beyond that expected of a resident at that level e.g. taking part in mandatory local teaching. - Has contributed but not a significant role leading.
7 to 9	- Several examples spanning duration of training. - Examples show relevance and interest in airway management. - Has had a significant role in the examples listed. - Progress towards Higher qualification e.g. PG Cert Education, Masters, PhD. - Presentations at Regional/National/International level. - Has been faculty in airway workshops.
10	- Able to demonstrate involvement in projects throughout training. - Majority of projects directly relate or show strong relevance to airway management. - Consistent leadership role in projects. - Has been faculty in airway workshops. - Multiple or significant examples of Regional/National/International work. - Published airway related articles in peer reviewed journals. - Higher qualification e.g. PG Cert Education, Masters, PhD. - Lists something unique that few other residents will have accomplished.

Anaesthesia for Bariatric Surgery & Perioperative Medicine

Score	Personal Statement
0	Not answered, or fails to make any mention of bariatric anaesthesia.
1 to 5	- A few sentences. - Bariatric anaesthesia mentioned, but does not fully outline why this speciality is of interest or what future plans would be on completion of SIA.
5 to 10	- A brief paragraph. - Nothing done to highlight achievements or interest in bariatric anaesthesia beyond what any other Stage 2 resident will have achieved. - Limited understanding of what bariatric anaesthesia entails. - Future plans in bariatric anaesthesia unclear.
10 to 15	- Reasonably well-structured statement. - Examples given to highlight interest or achievement in bariatric anaesthesia beyond typical Stage 2 experience (e.g. joined SOBA, presented a bariatric anaesthesia project at conference). - Shows some understanding of what bariatric anaesthesia entails. - Gives some indication of what a bariatric anaesthesia SIA would help them achieve in their career plans.
15 to 20	- Very well structured. - Several or significant examples given that demonstrate interest or achievement (e.g. prize winning presentation, regional/national bariatric anaesthesia relevant project). - Shows insight into what bariatric anaesthesia entails and their role in the wider MDT. - Highlights the skills they feel they can bring to the SIA (clinical and non-clinical). - Demonstrates they are patient focused. - Clearly outlines how an SIA in bariatric anaesthesia will impact future career.

Score	Supporting Information (i) Teaching / Training, (ii) QI / Research, (iii) Management / Leadership
0	Question not answered or totally irrelevant.
1 to 3	- Only offers one or two examples. - Examples are historical e.g. medical school/foundation level.
4 to 6	- Has a few recent examples. - Activities are not beyond that expected of a resident at that level e.g. taking part in mandatory local teaching. - Has taken part in an activity but not a significant role leading.
7 to 9	- Several examples spanning duration of training. - Examples show relevance to bariatric anaesthesia (do not have to be directly related). - Has had a significant role in the examples listed. - Progress towards Higher qualification in this area e.g. PG Cert Education, Masters, PhD. - Examples took place or were presented at Regional/National/International level.
10	- Able to demonstrate involvement in projects throughout training. - Majority of projects directly relate or show strong relevance to bariatric anaesthesia. - Consistent leadership role in projects. - Higher qualification in this area e.g. PG Cert Education, Masters, PhD. - Multiple or significant examples of Regional/National/International work. - Lists something unique that few other residents will have accomplished.

Anaesthesia for Cardiac Surgery

Score	Personal Statement
0	Not answered, or fails to make any mention of cardiac anaesthesia.
1 to 5	- A few sentences. - Cardiac anaesthesia mentioned, but does not fully outline why this sub-speciality is of interest or what future plans would be on completion of a Cardiac SIA.
5 to 10	- A brief paragraph. - Limited mention of previous exposure to cardiac anaesthesia, but nothing done to highlight achievements or further interest in cardiac anaesthesia beyond what any other Stage 2 resident will have achieved. - Limited understanding of the anaesthetic involvement in cardiac surgery and perioperative care. - Future plans in relation to cardiac anaesthesia unclear.
10 to 15	- Reasonably well-structured statement. - Examples given to highlight interest or achievement in cardiac anaesthesia beyond typical Stage 2 experience (attendance at cardiac anaesthesia conferences, non-mandatory CPD i.e. not mandatory study days with cardiac topics). - Shows some understanding of what cardiac anaesthesia and perioperative management entails and the skills they have or wish to develop. - Gives some indication of what a Cardiac SIA would help them achieve in their career plans.
15 to 20	- Very well structured. - Several or significant examples given that demonstrate interest or achievement beyond Stage 2 experience (e.g. prize-winning presentation, regional/national cardiac anaesthesia-related project). - Shows deep insight into what cardiac anaesthesia entails and their role in the wider multidisciplinary team in cardiac surgery settings. - Highlights the skills they feel they can bring to the SIA (clinical and non-clinical). - Demonstrates they are patient-focused. - Clearly outlines how an SIA in Cardiac Anaesthesia will impact future career.

Score	Supporting Information (i) Teaching / Training, (ii) QI / Research, (iii) Management / Leadership
0	Question not answered or totally irrelevant.
1 to 3	- Only offers one or two examples. - Examples are historical e.g. medical school/foundation level.
4 to 6	- Has a few recent examples. - Activities are not beyond that expected of a resident at that level e.g. taking part in mandatory local teaching. - Has taken part in an activity but not a significant role leading.
7 to 9	- Several examples spanning duration of training. - Examples show relevance to cardiac anaesthesia. - Has had a significant role in the examples listed. - Progress towards Higher qualification e.g. PG Cert Education, Masters, PhD. - Examples took place or were presented at Regional/National/International level.
10	- Able to demonstrate involvement in projects throughout training. - Majority of projects directly relate or show strong relevance to cardiac anaesthesia. - Consistent leadership role in projects. - Higher qualification / working towards in cardiac specific area e.g. PG Cert Education, Masters, PhD. - ALS / ACLS instructor (candidate) - Multiple or significant examples of Regional/National/International work. - Lists something unique that few other residents will have accomplished.

Anaesthesia for Hepato-Pancreato-Biliary Surgery and Liver Transplantation

Score	Personal Statement
0	Not answered, or fails to make any mention of anaesthesia for liver transplant / HPB surgery.
1 to 5	- A few sentences. - Anaesthesia for liver transplant / HPB surgery mentioned, but does not fully outline why this speciality is of interest or what future plans would be on completion of SIA.
5 to 10	- A brief paragraph. - Mentions previous exposure to liver transplant or anaesthesia for major surgery, but nothing done to highlight achievements or interest in this area beyond what any other Stage 2 resident will have achieved. - Limited understanding of what anaesthesia for liver transplant entails. - Future plans in relation to liver transplant, HPB or major surgery unclear.
10 to 15	- Reasonably well-structured statement. - Examples given to highlight interest or achievement in liver transplant / HPB anaesthesia beyond typical Stage 2 experience (e.g. attendance at conferences / BASL webinars). - Shows some understanding of what anaesthesia for liver transplant entails. - Gives some indication of what this SIA would help them achieve in their career plans.
15 to 20	- Very well structured. - Several or significant examples given that demonstrate interest or achievement beyond stage 2 experience (e.g. prize winning presentation, regional/national transplant / HPB surgery relevant project). - Shows insight into what anaesthesia for liver transplant entails and their role in the wider MDT in a transplant centre. - Highlights the skills they feel they can bring to the SIA (clinical and non-clinical). - Demonstrates they are patient focused. - Clearly outlines how an SIA in liver transplant and HPB surgery will impact future career.

Score	Supporting Information (i) Teaching / Training, (ii) QI / Research, (iii) Management / Leadership
0	Question not answered or totally irrelevant.
1 to 3	- Only offers one or two examples. - Examples are historical e.g. medical school/foundation level.
4 to 6	- Has a few recent examples. - Activities are not beyond that expected of a resident at that level e.g. taking part in mandatory local teaching. - Has taken part in an activity but not a significant leading role.
7 to 9	- Several examples spanning duration of training. - Examples show relevance to anaesthesia for liver transplant / HPB surgery (can include anaesthesia for major surgery). - Has had a significant role in the examples listed. - Higher qualification in this area e.g. PG Cert Education, Masters, PhD. - Examples took place or were presented at Regional/National/International level.
10	- Able to demonstrate involvement in projects throughout training. - Majority of projects directly relate or show strong relevance to anaesthesia for liver transplant / HPB surgery. - Consistent leadership role in projects. - Higher qualification in this area e.g. PG Cert Education, Masters, PhD. - Multiple or significant examples of Regional/National/International work. - Lists something unique that few other residents will have accomplished.

Anaesthesia for Major General Surgery & Perioperative Medicine

Score	Personal Statement
0	Not answered, or fails to make any mention of anaesthesia for major surgery or perioperative medicine.
1 to 5	- A few sentences. - Anaesthesia for major surgery, management of high-risk patients or perioperative medicine mentioned but does not fully outline why this is of interest or what future plans would be on completion of SIA.
5 to 10	- A brief paragraph. - Limited mention of previous exposure, but nothing done to highlight achievements or further interest in anaesthesia for major surgery, management of high-risk patients or perioperative medicine, beyond what a typical Stage 2 resident will have achieved. - Limited understanding of what anaesthesia for major surgery, management of high-risk patients or perioperative medicine entails. - Future plans in relation to anaesthesia for major surgery, management of high-risk patients or perioperative medicine unclear.
10 to 15	- Reasonably well-structured statement. - Examples given to highlight interest or achievements in anaesthesia for major surgery, management of high-risk patients or perioperative medicine beyond typical Stage 2 experience (e.g. attendance or presentations at conferences/courses). - Shows some understanding of what anaesthesia for major surgery, management of high-risk patients or perioperative medicine entails. - Gives some indication of what this SIA would help them achieve in their career plans.
15 to 20	- Very well structured. - Several or significant examples given that demonstrate interest or achievement beyond stage 2 experience (e.g. prize-winning presentation, regional/national relevant project). - Shows insight into what anaesthesia for major surgery, management of high-risk patients and perioperative medicine entail and their role in the wider MDT in a tertiary / major centre. - Highlights the skills they feel they can bring to the SIA (clinical and non-clinical). - Demonstrates that they are patient focused. - Clearly outlines how this SIA will impact future career.

Score	Supporting Information (i) Teaching / Training, (ii) QI / Research, (iii) Management / Leadership
0	Question not answered or totally irrelevant.
1 to 3	- Only offers one or two examples. - Examples are historical e.g. medical school/foundation level.
4 to 6	- Has a few recent examples. - Activities are not beyond that expected of a resident at that level e.g. taking part in mandatory local teaching. - Has taken part in an activity but not a significant role leading.
7 to 9	- Several examples spanning duration of training. - Examples show relevance to anaesthesia for major surgery, management of high-risk patients or perioperative medicine (do not have to be directly related e.g. pre-operative assessment, pain management, regional anaesthesia in the context of major surgery, blood management, resuscitation). - Has had a significant role in the examples listed. - Progress towards obtaining higher qualifications relevant to this area e.g. PG Cert Education, Masters, PhD. - Examples took place or were presented at Regional/National/International level.
10	- Able to demonstrate involvement in projects throughout training. - Majority of projects directly relate or show strong relevance to anaesthesia for major surgery, management of high-risk patients or perioperative medicine. - Consistent leadership role in projects. - Has higher qualifications / actively working towards qualification relevant to this area. - Multiple or significant examples of Regional/National/International work. - Lists something unique that few other residents will have accomplished.

Anaesthesia for Neurosurgery

Score	Personal Statement
0	Not answered, or fails to make any mention of neuroanaesthesia.
1 to 5	- A few sentences. - Neuroanaesthesia mentioned, but does not fully outline why this speciality is of interest or what future plans would be on completion of SIA.
5 to 10	- A brief paragraph. - Stage 2 neuroanaesthesia mentioned, but nothing done to highlight achievements or interest in Neuroanaesthesia beyond what any other Stage 2 resident will have achieved. - Limited understanding of what neuroanaesthesia entails. - Future plans in Neuroanaesthesia unclear.
10 to 15	- Reasonably well-structured statement. - Examples given to highlight interest or achievement in neuroanaesthesia beyond typical Stage 2 experience (e.g. joined NACCS/SNACC, presented a neuro project at conference). - Shows some understanding of what neuroanaesthesia entails. - Gives some indication of what a Neuro SIA would help them achieve in their career plans.
15 to 20	- Very well structured. - Several or significant examples given that demonstrate interest or achievement beyond stage 2 neuroanaesthesia (e.g. prize winning presentation, regional/national neuro relevant project). - Shows insight into what neuroanaesthesia entails and their role in the wider MDT in neurosciences. - Highlights the skills they feel they can bring to the SIA (clinical and non-clinical). - Demonstrates they are patient focused. - Clearly outlines how an SIA in neuroanaesthesia will impact future career.

Score	Supporting Information (i) Teaching / Training, (ii) QI / Research, (iii) Management / Leadership
0	Question not answered or totally irrelevant.
1 to 3	- Only offers one or two examples. - Examples are historical e.g. medical school/foundation level.
4 to 6	- Has a few recent examples. - Activities are not beyond that expected of a resident at that level e.g. taking part in mandatory local teaching. - Has taken part in an activity but not a significant leading role.
7 to 9	- Several examples spanning duration of training. - Examples show relevance to neuroanaesthesia (do not have to be directly related). - Has had a significant role in the examples listed. - Higher qualification in this area e.g. PG Cert Education, Masters, PhD. - Examples took place or were presented at Regional/National/International level.
10	- Able to demonstrate involvement in projects throughout training. - Majority of projects directly relate or show strong relevance to neuroanaesthesia. - Consistent leadership role in projects. - Higher qualification in this area e.g. PG Cert Education, Masters, PhD. - Multiple or significant examples of Regional/National/International work. - Lists something unique that few other residents will have accomplished.

Anaesthesia for Thoracic Surgery

Score	Personal Statement
0	Not answered, or fails to make any mention of Thoracic Anaesthesia.
1 to 5	- A few sentences. - Thoracic Anaesthesia mentioned, but does not fully outline why this speciality is of interest or what future plans would be on completion of SIA.
5 to 10	- A brief paragraph. - Stage 2 Thoracic Anaesthesia mentioned, but nothing done to highlight achievements or interest in Thoracic Anaesthesia beyond what any other Stage 2 resident will have achieved. - Limited understanding of what Thoracic Anaesthesia entails. - Future plans in Thoracic Anaesthesia unclear.
10 to 15	- Reasonably well-structured statement. - Examples given to highlight interest or achievement in Thoracic Anaesthesia beyond typical Stage 2 experience (e.g. attendance of a one lung course, thoracic themed education days provided by HEE, ACTAC). - Shows some understanding of what Thoracic Anaesthesia entails. - Gives some indication of what a Thoracic Anaesthesia SIA would help them achieve in their career plans.
15 to 20	- Very well structured. - Several or significant examples given that demonstrate interest or achievement beyond stage 2 Thoracic Anaesthesia (e.g. prize winning presentation, regional/national Thoracic relevant project, attendance at international Thoracic Anaesthesia Conference, EACTAIC). - Shows insight into what Thoracic Anaesthesia entails and their role in the wider MDT in Thoracic Anaesthesia. - Highlights the skills they feel they can bring to the SIA (clinical and non-clinical). - Demonstrates they are patient focused. - Clearly outlines how an SIA in Thoracic Anaesthesia will impact future career.

Score	Supporting Information (i) Teaching / Training, (ii) QI / Research, (iii) Management / Leadership
0	Question not answered or totally irrelevant.
1 to 3	- Only offers one or two examples. - Examples are historical e.g. medical school/foundation level.
4 to 6	- Has a few recent examples. - Activities are not beyond that expected of a resident at that level e.g. taking part in mandatory local teaching. - Has taken part in an activity but not a significant role leading.
7 to 9	- Several examples spanning duration of training. - Examples show relevance to Thoracic Anaesthesia (do not have to be directly related). - Has had a significant role in the examples listed. - Higher qualification e.g. PG Cert Education, Masters, PhD. - Examples took place or were presented at Regional/National/International level.
10	- Able to demonstrate involvement in projects throughout training. - Majority of projects directly relate or show strong relevance to Thoracic Anaesthesia. - Consistent leadership role in projects. - Higher qualification e.g. PG Cert Education, Masters, PhD. - Multiple or significant examples of Regional/National/International work. - Lists something unique that few other residents will have accomplished.

Anaesthesia for Vascular Surgery

Score	Personal Statement
0	Not answered, or fails to make any mention of vascular anaesthesia.
1 to 5	- A few sentences. - Vascular anaesthesia or management of high-risk patients mentioned but does not fully outline why this speciality is of interest or what future plans would be on completion of SIA.
5 to 10	- A brief paragraph. - Limited mention of previous exposure, but nothing done to highlight achievements or further interest in vascular anaesthesia or management of the high-risk vascular patient beyond what a typical Stage 2 resident will have achieved. - Limited understanding of what anaesthesia for vascular procedures entails. - Future plans in relation to vascular anaesthesia unclear.
10 to 15	- Reasonably well-structured statement. - Examples given to highlight interest or achievement in vascular anaesthesia and management of vascular patients beyond typical Stage 2 experience (attendance or presentations at conferences, non-mandatory CMEs with vascular anaesthesia specific topics). - Shows some understanding of what anaesthesia for vascular procedures entails. - Gives some indication of what a Vascular SIA would help them achieve in their career plans.
15 to 20	- Very well structured. - Several or significant examples given that demonstrate interest or achievement beyond stage 2 experience (e.g. prize-winning presentation, regional/national vascular anaesthesia related project). - Shows insight into what management of the vascular patient and management of anaesthesia for vascular procedures entails and their role in the wider MDT in a tertiary / major vascular centre. - Highlights the skills they feel they can bring to the SIA (clinical and non-clinical). - Demonstrates that they are patient focused. - Clearly outlines how an SIA in Vascular Anaesthesia will impact future career.

Score	Supporting Information (i) Teaching / Training, (ii) QI / Research, (iii) Management / Leadership
0	Question not answered or totally irrelevant.
1 to 3	- Only offers one or two examples. - Examples are historical e.g. medical school/foundation level.
4 to 6	- Has a few recent examples. - Activities are not beyond that expected of a resident at that level e.g. taking part in mandatory local teaching. - Has taken part in an activity but not a significant role leading.
7 to 9	- Several examples spanning duration of training. - Examples show relevance to vascular anaesthesia (do not have to be directly related e.g. pre-operative assessment and management of high-risk patients, pain management, regional anaesthesia in the context of vascular patients, blood management, resuscitation). - Has had a significant role in the examples listed. - Progress towards obtaining higher qualifications relevant to this area e.g. PG Cert Education, Masters, PhD. - Examples took place or were presented at Regional/National/International level.
10	- Able to demonstrate involvement in projects throughout training. - Majority of projects directly relate or show strong relevance to vascular anaesthesia. - Consistent leadership role in projects. - Has higher qualifications / actively working towards qualification relevant to this area. - Multiple or significant examples of Regional/National/International work. - Lists something unique that few other residents will have accomplished.

Obstetric Anaesthesia

Personal Statement (max 20 points)
Why you want to do obstetric anaesthesia? (max 10 points) - Understands key roles/responsibilities of an obstetric anaesthetist e.g. being an active MDT member, making significant impact to patient experience (max 5 points). - Insight into furthering personal/professional development by completing obstetric anaesthesia SIA e.g. improving regional anaesthesia technique, managing massive haemorrhage cases (max 5 points).
Commitment to obstetric anaesthesia (1 point for each – max 10 points) - Attendance at MOET/PROMPT course - Attendance at local/regional study day in obstetric anaesthesia - Teaching members of the delivery suite MDT e.g. midwives, obstetricians - Awareness of current topic(s) in obstetrics e.g. Ockenden report - Attendance at local obstetric meeting of interest e.g. mortality and morbidity meeting - Completion of obstetric QI project - Membership of OAA - Attendance at obstetric educational meeting e.g. OAA ASM - Poster/oral presentation at obstetric educational meeting e.g. OAA ASM - Other appropriate personal activity relevant to obstetric anaesthesia

Score	Teaching / Training (max 10 points)
10	Teaching qualification e.g. PG certificate/PG diploma/Masters and/or organised national/regional teaching programme for healthcare professionals/medical students.
8	Organised local teaching programme for healthcare professionals/medical students and/or teaching faculty for healthcare professionals/medical students at 3 or more national/regional/local courses.
6	National teaching faculty for healthcare professionals/medical students (1-2 courses).
4	Regional teaching faculty for healthcare professionals/medical students (1-2 courses).
2	Local teaching faculty for healthcare professionals/medical students (1-2 courses).
0	No teaching involvement.

Score	Audit / QI (max 5 points)
5	Led audit/QI project with change enacted.
3	Involvement in more than one audit/QI project with change enacted in each.
1	Involvement in one audit/QI project with change enacted.
0	No audit/QI involvement.

Score	Research (max 5 points)
5	Research qualification e.g. PhD and/or at least one publication in peer-reviewed journal.
3	Project investigator for more than one research project.
1	Project investigator for one research project.
0	No research involvement.

Score	Management / Leadership (max 10 points)
10	Management/leadership in a national role e.g. BMA, RCoA.
8	Management/leadership in more than one regional role e.g. viva course organising committee, regional resident representative.
6	Management/leadership in one regional role.
4	Management/leadership in more than one local role e.g. rota writing, local faculty group representative.
2	Management/leadership in one local role.
0	No management/leadership involvement.

Paediatric Anaesthesia

Score	Personal Statement
0	Not answered, or fails to make any mention of Paediatric Anaesthesia.
1 to 5	- A few sentences. - Paediatric Anaesthesia is mentioned, but does not fully outline why this speciality is of interest or what future plans would be on completion of SIA.
5 to 10	- A brief paragraph. - Stage 2 Paediatric Anaesthesia mentioned, but nothing done to highlight achievements or interest in Paediatric Anaesthesia beyond what any other Stage 2 resident will have achieved. - Limited understanding of what Paediatric Anaesthesia entails. - Future plans in Paediatric Anaesthesia unclear.
10 to 15	- Reasonably well-structured statement. - Examples given to highlight interest or achievement in Paediatric Anaesthesia beyond typical Stage 2 experience (e.g. joined APAGBI, presented a Paediatric Anaesthesia related project at conference). - Shows some understanding of what Paediatric Anaesthesia entails. - Gives some indication of what a Paediatric Anaesthesia SIA would help them achieve in their career plans.
15 to 20	- Very well structured. - Several or significant examples given that demonstrate interest or achievement beyond stage 2 Paediatric Anaesthesia (e.g. prize winning presentation, regional/national relevant project, instructor on Paediatric life-support course). - Shows insight into what Paediatric Anaesthesia entails and their role in the wider MDT in paediatrics. - Highlights the skills they feel they can bring to the SIA (clinical and non-clinical). - Demonstrates they are patient focused. - Clearly outlines how an SIA in Paediatric Anaesthesia will impact future career.

Score	Supporting Information (i) Teaching / Training, (ii) QI / Research, (iii) Management / Leadership
0	Question not answered or totally irrelevant.
1 to 3	- Only offers one or two examples. - Examples are historical e.g. medical school/foundation level.
4 to 6	- Has a few recent examples. - Activities are not beyond that expected of a resident at that level e.g. taking part in mandatory local teaching. - Has taken part in an activity but not a significant leading role.
7 to 9	- Several examples spanning duration of training. - Examples show relevance to paediatric anaesthesia (can include acute pain, resuscitation i.e. do not have to be directly related). - Has had a significant role in the examples listed. - APLS/EPALS completed. - Progress towards Higher qualification e.g. PG Cert Education, Masters, PhD. - Examples took place or were presented at Regional/National/International level.
10	- Able to demonstrate involvement in projects throughout training. - Majority of projects directly relate or show strong relevance to paediatric anaesthesia. - Consistent leadership role in projects. - Higher qualification / working towards in trauma specific area e.g. PG Cert Education, Masters, PhD. - APLS/EPALS instructor (candidate). - Multiple or significant examples of Regional/National/International work. - Lists something unique that few other residents will have accomplished.

Regional Anaesthesia

Score	Personal Statement
0	Not answered, or fails to make any mention of regional anaesthesia.
1 to 5	- A few sentences. - Regional anaesthesia mentioned, but does not fully outline why this speciality is of interest or what future plans would be on completion of SIA.
5 to 10	- A brief paragraph. - Limited mention of previous exposure, but nothing done to highlight achievements or further interest in Regional Anaesthesia management beyond what any other Stage 2 resident will have achieved. - Limited understanding of potential role/importance/benefits or regional anaesthesia. - Future plans in relation to regional anaesthesia unclear.
10 to 15	- Reasonably well-structured statement. - RA-UK, ESRA, ASRA or other relevant specialist society membership. - Examples given to highlight interest or achievement in regional anaesthesia beyond typical Stage 2 experience (attendance at conferences, non-mandatory CME i.e. not mandatory study days with regional anaesthesia topics). - Shows some understanding of potential role/importance/benefits of regional anaesthesia. - Gives some indication of what a regional anaesthesia SIA would help them achieve in their career plans.
15 to 20	- Very well structured. - Several or significant examples given that demonstrate interest or achievement beyond stage 2 experience (e.g. prize-winning presentation, regional/national regional anaesthesia-relevant project). - Shows insight into the benefits of regional anaesthesia within an acute or elective setting and the potential role of regional anaesthesia in patient outcomes, experience and service delivery/efficiency. - Highlights the skills they feel they can bring to the SIA (clinical and non-clinical). - Demonstrates they are patient focused. - Member of specialist Societies mentioned. - Clearly outlines how an SIA in regional anaesthesia will impact future career.

Score	Supporting Information (i) Teaching / Training, (ii) QI / Research, (iii) Management / Leadership
0	Question not answered or totally irrelevant.
1 to 3	- Only offers one or two examples. - Examples are historical e.g. medical school/foundation level.
4 to 6	- Has a few recent examples. - Activities are not beyond that expected of a resident at that level e.g. taking part in mandatory local teaching. - Has taken part in an activity but not a significant role leading.
7 to 9	- Several examples spanning duration of training. - Examples show relevance to regional anaesthesia (can include rib or hip fracture care, acute pain, training in regional anaesthesia, evaluating new techniques or quality of analgesia after intervention, simulation or emergency management of RA complications). - Has had a significant role in the examples. - RA-UK, ESRA, ASRA or other relevant specialist society membership. - Progress towards Higher qualification e.g. PG Cert Education, Masters, PhD. - Examples took place or were presented at Regional/National/International level.
10	- Able to demonstrate involvement in projects throughout training. - Majority of projects directly relate or show strong relevance to Regional Anaesthesia. - Consistent leadership role in projects. - Higher qualification / working towards in Regional Anaesthesia specific area e.g. ESRA-Diploma in Regional anaesthesia, PG Cert Education / Masters in Regional Anaesthesia or PhD. - Teaches on Regional Anaesthesia Courses - Local, National (RA-UK/RCOA or AoA). - Multiple or significant examples of Regional/National/International work. - Lists something unique that few other residents will have accomplished.

Trauma & Stabilisation

Score	Personal Statement
0	Not answered, or fails to make any mention of trauma.
1 to 5	- A few sentences. - Trauma / Trauma Anaesthesia mentioned, but does not fully outline why this speciality is of interest or what future plans would be on completion of SIA.
5 to 10	- A brief paragraph. - Limited mention of previous exposure, but nothing done to highlight achievements or further interest in Trauma management beyond what any other Stage 2 resident will have achieved. - Limited understanding of what anaesthetic involvement in trauma entails. - Future plans in relation to trauma unclear.
10 to 15	- Reasonably well-structured statement. - Examples given to highlight interest or achievement in trauma anaesthesia / resuscitation beyond typical Stage 2 experience (attendance at conferences, non-mandatory CME ie not mandatory study days with trauma topic). - Shows some understanding of what trauma anaesthesia / major trauma management entails. - Gives some indication of what a Trauma SIA would help them achieve in their career plans.
15 to 20	- Very well structured. - Several or significant examples given that demonstrate interest or achievement beyond stage 2 experience (e.g. prize winning presentation, regional/national trauma-relevant project). - Shows insight into what trauma management entails and their role in the wider MDT in a major trauma centre. - Highlights the skills they feel they can bring to the SIA (clinical and non-clinical). - Demonstrates they are patient focused. - Clearly outlines how an SIA in Trauma & Stabilisation will impact future career.

Score	Supporting Information (i) Teaching / Training, (ii) QI / Research, (iii) Management / Leadership
0	Question not answered or totally irrelevant.
1 to 3	- Only offers one or two examples. - Examples are historical e.g. medical school/foundation level.
4 to 6	- Has a few recent examples. - Activities are not beyond that expected of a resident at that level e.g. taking part in mandatory local teaching. - Has taken part in an activity but not a significant role leading.
7 to 9	- Several examples spanning duration of training. - Examples show relevance to trauma management (can include prehospital care, acute pain, resuscitation i.e. do not have to be directly related). - Has had a significant role in the examples listed. - ATLS / ETC / ATACC completed. - Progress towards Higher qualification e.g. PG Cert Education, Masters, PhD. - Examples took place or were presented at Regional/National/International level.
10	- Able to demonstrate involvement in projects throughout training. - Majority of projects directly relate or show strong relevance to trauma. - Consistent leadership role in projects. - Higher qualification / working towards in trauma specific area e.g. PG Cert Education, Masters, PhD. - ATLS / ETC / ATACC instructor (candidate). - Multiple or significant examples of Regional/National/International work. - Lists something unique that few other residents will have accomplished.

Management and Professional and Regulatory Requirements

Score	Personal Statement
0	Not answered, or fails to make any mention of leadership & management.
1 to 5	- A few sentences. - Leadership & Management mentioned, but does not fully outline why this is of interest or what future plans would be on completion of SIA.
5 to 10	- A brief paragraph. - Past experience mentioned, but nothing done to highlight achievements or interest in leadership & management beyond what any other Stage 2 resident will have achieved. - Limited understanding of what leadership & management entails. - Future plans in Leadership & Management unclear.
10 to 15	- Reasonably well-structured statement. - Examples given to highlight interest or achievement in Leadership & Management beyond typical Stage 2 experience (e.g. leadership roles held previously, evidence of reflection on previous leadership experiences). - Shows some understanding of what Leadership & Management entails. - Gives some indication of how a Management SIA would help them in their career plans.
15 to 20	- Very well structured. - Several or significant examples given that demonstrate interest or achievement beyond stage 2 Leadership & Management (e.g. evidence of project or role that involved significant leadership and management of change). - Shows insight into what Leadership & Management entails and their role in the wider MDT, including showing insight into NHS management and leadership structures. - Highlights the skills they feel they can bring to the SIA. - Demonstrates an interest in changing the culture around leadership development for residents and widening participation in leadership activities. - Clearly outlines how an SIA in Leadership & Management will impact future career.

Score	Supporting Information (i) Teaching / Training, (ii) QI / Research, (iii) Management / Leadership
0	Question not answered or totally irrelevant.
1 to 3	- Only offers one or two examples. - Examples are historical e.g. medical school/foundation level.
4 to 6	- Has a few recent examples. - Activities are not beyond that expected of a resident at that level e.g. taking part in mandatory local teaching. - Has taken part in an activity but not a significant leading role.
7 to 9	- Several examples spanning duration of training. - Examples show relevance to Leadership & Management (do not have to be directly related). - Has had a significant role in the examples listed. - Higher qualification in this area e.g. PG Cert Education, Masters, PhD. - Examples took place or were presented at Regional/National/International level.
10	- Able to demonstrate involvement in projects throughout training. - Majority of projects directly relate or show strong relevance to and evidence of Leadership & Management. - Consistent leadership role in projects. - Higher qualification in this area e.g. PG Cert Education, Masters, PhD. - Multiple or significant examples of Regional/National/International work. - Lists something unique that few other residents will have accomplished.