

Addenbrooke's Hospital

Addenbrooke's is the teaching hospital for the University of Cambridge and is a flagship NHS hospital having achieved NHS Foundation Trust status in July 2004. The anaesthetic department at Addenbrooke's is an ever expanding, innovative and dynamic department of 85 Consultants, 40 Trainees, 10 CESR fellows and 20 Higher and Senior Clinical Fellows, providing anaesthetic services in this thriving, modern teaching hospital. Situated just 2 miles from junction 11 of the M11 and 3 miles from Cambridge city centre, Addenbrooke's is also just a 45 minute train ride from London. The beaches and attractions of Norfolk and Suffolk are just under 2 hours away.



Addenbrooke's not only provides a broad range of medical services for people living in the Cambridge area but is also a regional/supra-regional referral centre for a number of specialties including cancer surgery, neurosurgery, transplantation, plastic surgery, vascular surgery and paediatrics along with obstetrics at the co-located Rosie Hospital. As a world-renowned teaching hospital, there is unparalleled capacity for teaching and research including involvement in the high fidelity simulation centre, and research projects within the department as well as the wider biomedical campus. Addenbrooke's has strong international links particularly through the University and it is a world-class centre for medical research.

The departmental mission is to provide high quality and effective anaesthetic, procedural and perioperative care services to Cambridge University Hospitals.

The departmental vision is to be an internationally recognized department for excellent clinical care, innovative clinical research and outstanding teaching whilst remaining fully engaged in local, regional and national policy and governance.

There are unparalleled opportunities for anaesthetic training at Addenbrooke's with Stage 3 training opportunities available in airway management, major general anaesthesia including for upper gastrointestinal and hepatobiliary and gynaecological-oncological surgery, transplant anaesthesia, neuroanaesthesia, obstetric anaesthesia, paediatric anaesthesia, pain, perioperative medicine, regional anaesthesia, trauma anaesthesia and vascular anaesthesia.



Airway Anaesthesia

We offers excellent and wide-ranging experience in airway management. Trainees will receive experience in anaesthesia for head and neck oncology and reconstructions; maxillo-facial and dental surgeries including osteotomies and trauma restorative surgery, neurosurgical procedures for unstable spine and base of skull and management of the difficult paediatric airway. Trainees will be able to master the use of different supraglottic and subglottic devices, jet ventilation, videolaryngoscopy and newer techniques such as THRIVE. Cambridge University Hospital runs several courses including the Advanced Airway Management Course at the Simulation Centre and an Awake Fiberoptic Intubation Course.

Major General Anaesthesia

We perform a wide variety of surgeries ranging from routine day cases to more complex procedures. We have a busy urology service with cases ranging from high turnover cystoscopy lists to cystectomies; one theatre is dedicated for robotic surgery (nephrectomies and prostatectomies). There is ample opportunity to gain experience in gynaecological procedures and we are a regional centre for gynaecological-oncology. We do in excess of 200 major oesophagogastric oncological resections (open as well as minimally invasive surgery) annually, major colorectal surgery (e.g. pelvic exenterations, open abdominoperineal resections), hepato-pancreato-biliary surgery (pancreatoduodenectomies, pancreatetectomies, hepatectomies) and perform around 250 NELA laparotomies per

annum (of which a significant number are high risk and / or frail elderly patients with multiple comorbidities). Addenbrooke's achieve some of the best mortality outcomes in the country for our NELA patients. We also perform day cases at Princess of Wales hospital in Ely.

Neuroanaesthesia

One of the largest neurosurgical units in the country, with international repute, Addenbrooke's covers a diverse population of 6 million. We are the regional referral center for neurosurgery for both adults and paediatrics. In 2019 we undertook over 2500 neurosurgical operations. We have dedicated neuroanaesthesia pre-op assessment unit with specialized pre-op investigation guidelines and dedicated interventional neuroradiology which imparts excellent experience in anaesthesia for remote locations. Specific anaesthetic skill training will include pediatric neurosurgery, the principles of TIVA, how to interpret neuroimages, advanced airway management skills, advanced vascular access techniques, multidisciplinary tutorials, lectures, courses, meetings and ward rounds, e-Learning (neuroanaesthesia theory – access to free of charge e-learning website) and simulation training including transfer training. There are opportunities for research in conjunction with the University Department of Anaesthesia



Obstetric Anaesthesia (Rosie Hospital)

In this busy, tertiary centre, we undertake approximately 5,500 deliveries a year; our current caesarean section rate is 30-32% and our labour epidural rate 35%; we have 6 dedicated elective caesarean section lists per week and in 2019 carried out over 2,500 theatre cases. You will have the opportunity to be involved in the care of high risk parturients on labour ward, in theatre and in our Obstetric Close Observation Unit which looks after approximately 80 Intensive Care Society Level 1 and 15 Level 2 patients per month. Our Obstetric Close Observation unit is staffed by a core group of midwives with enhanced maternity skills training and is among only 6% of UK maternity units able to provide such care. You will develop the skills to care for parturients undergoing complex procedures, such as caesarean delivery with abnormal placentation. Additional clinical opportunities include attending High Risk Anaesthetic Obstetric Clinic (7 per month), participating in multidisciplinary team meetings and attending the Obstetric Cardiac, Haematology and Fetal Medicine clinics. We have a number of ongoing research and quality improvement opportunities which you will be able to contribute to, which will enhance patient care and give you the opportunity to present your findings at local, regional and national meetings.

Paediatric Anaesthesia

The paediatric anaesthetic unit is a secondary and regional tertiary service which provides an impressive facility for children and babies throughout the East of England. We are the major trauma centre for the East of England, which gives us the opportunity to play a pivotal role in the resuscitation of all children admitted through the Emergency Department. At Addenbrooke's we have a strong paediatric group consisting of 12 full time paediatric anaesthetists and a large number of our general colleagues who are able to anaesthetise older children. Addenbrooke's currently annually undertakes over 7500 surgeries per year in children under the age of 14, with almost 1200 in children under one year of age, including 150-200 neonatal surgeries. We offer comprehensive clinical experience in most paediatric surgical specialties. Our work is supported by on-site paediatric intensive care unit (11 PICU/2 HDU) and newly built, state of the art Level 3 neonatal intensive care unit in the Rosie Maternity Hospital (22 NICU/16 SCBU). We are an active department, who participate in undergraduate and postgraduate teaching. We are committed to quality improvement and there are opportunities to be involved in local, national and international projects. There is an opportunity of placement in PICU which should be pre-arranged if someone wishes to.



Perioperative Medicine at CUH

Training in perioperative medicine at Cambridge University Hospitals benefits from a large case load of complex major surgery, in a variety of surgical disciplines, an established multidisciplinary preoperative optimisation service and the existence of anaesthetic-led post-acute care facilities. Approximately 16,000 patients per year are seen at the Preoperative Assessment (POA) Clinic and pre-assessed by anaesthetic specialist nurses. Nurses are supported by a designated consultant anaesthetist with a subspecialty interest in preoperative medicine. Selected patients are booked to attend a face-to-face or videoconference Anaesthetic Risk Assessment Clinic.

Frail elderly patients undergoing elective surgery are referred to the multidisciplinary PRIME (Preoperative Review Informing Management of Elective surgery) Clinic where they are seen by a team consisting of a consultant geriatrician, consultant anaesthetist, occupational therapist and physiotherapist. With three clinics per week, the PRIME team sees over 500 patients per year. The typical PRIME appointment consists of a comprehensive geriatric assessment (including cognitive function), an anaesthetic assessment, a functional capacity assessment, a joint therapy assessment (including bespoke exercise advice and discharge and

rehabilitation planning), shared decision making utilising risk scoring tools and perioperative risk counselling. PRIME patients have been found to have perioperative complication rates and length of stay equivalent to non-frail patients and a significant proportion choose not to proceed with surgery. There is in addition a weekly joint Aortic Surgery Risk Clinic, with a consultant vascular surgeon and consultant vascular anaesthetist, followed by an MDT discussion of forthcoming complex vascular surgery patients. Prehabilitation of complex cancer and vascular surgery patients at CUH commenced in 2020 with the advent of the Fit 4 Surgery Service: a weekly video seminar, focused on providing patients with multimedia information outlining their forthcoming admission, anaesthesia and rehabilitation, lifestyle advice, diet and fitness preoperative guidance and breathing exercise coaching. This is delivered by a multidisciplinary team, comprised of an anaesthetist, an anaesthetic nurse specialist and physiotherapist.



Immediate postoperative care of patients undergoing major surgery at CUH takes place in the Overnight Intensive Recovery, soon to be transformed into a 12 bed Post-Acute Care Unit. PACU will be anaesthetic run, with designated consultant anaesthetist daytime cover. This will give trainees a unique opportunity to experience integrated perioperative care, from preoperative assessment and optimisation, through intraoperative management and postoperative recovery.

Regional Anaesthesia

Addenbrooke's Hospital provides wider training opportunities in the field of nerve stimulation as well as ultrasound guided regional anaesthesia. These are not just limited to upper limb blocks but also lower limb, truncal and fascial plane blocks. Excellent supervision and teaching is provided by a group of consultants who are well known in their field and are passionate about teaching. We are also in the process of setting up a service to provide analgesia for rib fractures. Addenbrooke's hospital has run a training course in ultrasound guided nerve blocks every year since 2005. This course is recognised by ESRA and RA-UK for European Diploma in Regional Anaesthesia. The course is very popular attracting national and international faculty and delegates. We have excellent ties with University Department of Anatomy and Radiology department producing some high-quality research over the years.

Teaching and Simulation Opportunities

There is an active teaching programme for our trainees and fellows, including intense exam preparation, with an excellent track record in success rates for the final FRCA exam. We run a monthly journal club, and half day clinical governance morning followed by a trainee teaching afternoon. In addition, we currently run remote teaching sessions for our post CCT fellows with the aim of preparing them for their consultant career. We are the central teaching hospital for Cambridge University Clinical School. Medical students at the University are attached to the department during their first and final clinical years. Some students also choose to undertake elective modules in anaesthesia, peri-operative medicine and critical care. Undergraduate teaching is a core component of consultant work.

Addenbrooke's, linked with the Post Graduate Medical Centre, offers an on-site high fidelity simulation suite offering a full spectrum of multi-professional and interdisciplinary learning. Within anaesthesia, the centre provides airway, anaesthetic crisis, obstetric crisis, transfer medicine and paediatric courses in addition to the CASTLE course (Cambridge Simulation Training for Leading Educators) to help those who are starting out on their journey with facilitation and debriefing. The Centre maintains a wide range of the latest equipment from high fidelity mannequins to virtual bronchoscopy and echocardiography simulators and more.



Transplant/HPB Anaesthesia

CUH has a world renowned Transplant Department, performing around 120 liver, 200 kidney and 20 kidney-pancreas transplants every year. Besides this, CUH is the only centre in the UK licensed to perform multivisceral transplants (around 12/year). There is a friendly team of transplant anaesthetists & surgeons who provide this service, the outcomes of which are amongst the best in the world. CUH is the regional centre for HPB & pancreatic surgery. Around 120 Whipple's procedures and 180 liver resections are carried out every year, again with some of the best outcomes in the country.

Trauma and Stabilisation

Addenbrooke's is the major trauma centre for the East of England and receives in excess of 1900 major trauma cases per year. Anaesthetists are part of the tier 1 trauma team allowing regular experience of reception, resuscitation and transfer of critically injured trauma patients. There is close working with the emergency department; the major trauma network is coordinated by our ED consultants so trainees may gain experience of this. CUHFT is also the regional neurosurgical centre and contains the internationally renowned neurocritical

care unit where the majority of trauma patients requiring level 2 or 3 care are located. With the recent move of Royal Papworth all surgical disciplines required for trauma patients are located on the Cambridge Biomedical Campus, we are a regional vascular referral centre and in addition operate a 24/7 interventional radiology service. There has been recent establishment of a major trauma service with hope to develop a trauma ward in addition to existing acute and long term rehabilitation facilities.

Vascular Anaesthesia

Addenbrooke's offers excellent advanced training in vascular anaesthesia being a tertiary referral centre, and one of the top centres in the country. The hybrid theatre within the main theatre suite means complex abdominal and thoracic endovascular aneurysm repairs are regularly performed. There is a vascular anaesthetist presence in the weekly surgical MDT discussion, and the Complex Aortic Aneurysm Clinic.