WHO IS THE ANAESTHETIST?

FIFTH EDITION 2013

www.aagbi.org/professionals/trainees
GROUP OF ANAESTHETISTS IN TRAINING

GAT (Group of Anaesthetists in Training) is the trainee body of the Association of Anaesthetists of Great Britain and Ireland (AAGBI) through which anaesthetists are represented at a national level. All trainee members of the Association are automatically members of GAT and currently account for about a third of the membership of the AAGBI. Approximately 70% of all anaesthetic trainees in the UK are members of GAT.

The elected GAT Committee has representatives at all levels of training from within the UK and Ireland. The committee aims to represent the views and perspectives of anaesthetic trainees throughout the UK and Ireland. The GAT Committee also has links with anaesthesia training bodies around the world. We strive to maintain transparency and accuracy, allowing trainees to make their own informed opinions on issues that will affect them as professionals both at the current time and in their future career.

Information is relayed back through the GAT website (www.aagbi.org/professionals/trainees) and Trainee Network Leads who are in all schools of anaesthesia nationwide. A comprehensive list of current Trainee Network Leads is available on the GAT website.

ASSOCIATION OF ANAESTHETISTS OF GREAT BRITAIN AND IRELAND

The Association of Anaesthetists of Great Britain and Ireland (AAGBI) represents the medical and political views of over 10,000 anaesthetists in the UK and the Republic of Ireland. Through its overseas membership it has close contact with anaesthetists in many other countries. The AAGBI is run by the Council who are elected from the membership for a term of four years. The Executive Officers are elected from within the Council.

The AAGBI has a broad constitution that enables it to promote and advance education, safety and research in anaesthesia, as well as the professional aspects of the specialty and the welfare of individual anaesthetists. The AAGBI has been responsible for initiating or promoting many major developments in British and Irish anaesthesia, and continues to thrive. It issues and revises guidelines and advice, and encourages and supports specialist societies. The AAGBI continues to raise the profile and enhance the image of anaesthetists to the public.
THE ROYAL COLLEGE OF ANAESTHETISTS

The Royal College of Anaesthetists (RCoA) is the professional body responsible for the specialty of anaesthesia throughout the United Kingdom. Its principal responsibility is to ensure the quality of patient care through the maintenance of standards in anaesthesia, pain medicine and critical care. The College’s activities include:

• Setting standards of clinical care
• Establishing standards for the training of anaesthetists and those practicing critical care and/or acute and chronic pain medicine
• Setting and running examinations
• Continued medical education of all anaesthetists.

Every hospital with anaesthetists in training has a College Tutor who can give advice on training. Information is relayed to members via the RCoA website (www.rcoa.ac.uk) and in the bi-monthly College Bulletin.

THE COLLEGE OF ANAESTHETISTS OF IRELAND

The College of Anaesthetists of Ireland exists to promote best practice in the fields of anaesthesia, intensive care and pain medicine through its training, examination and educational programmes. The College is responsible for setting training standards and for the organisation, supervision and counselling of doctors in training in Ireland.
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WHO SHOULD READ THIS?

This guide is designed for medical students and foundation doctors who are considering a career in anaesthesia. Historically, junior doctors were able to spend several years sampling different specialties before making their career choices but this is now increasingly difficult. Foundation doctors have to make tough decisions about their future careers, sometimes with limited knowledge and experience of the possibilities.

We hope to explain what a career in anaesthesia entails and explore some of the aptitudes and skills required. We hope that this will allow you to make a more informed choice and so start on a successful, enjoyable and rewarding career.

INTRODUCTION

Anaesthetists encounter a wide range of patients and specialties. We are one of the largest hospital departments and work in a variety of settings. Our core activity is providing anaesthesia for surgery but this straddles ages and pathologies. It is a very different challenge to anaesthetise a healthy two-year old for day surgery compared with a frail elderly patient for an emergency laparotomy. We are evolving into peri-operative physicians, responsible for assessment and optimisation pre-operatively, ensuring optimal operative conditions and providing peri-operative support to surgical teams.

Our training programme encourages anaesthetists to generate an in-depth understanding of basic science, physiology and pharmacology. We learn how to apply these principles to the broad landscape of clinical practice within the hospital, spanning medical and surgical specialities. This knowledge is married to the development of expert practical skills and a patient centred approach, allowing us to manage the large spectrum of patients requiring anaesthetic services. In one day you may go from seeing outpatients in a chronic pain clinic to performing an awake fibreoptic intubation for impending airway compromise, or resuscitating patients with polytrauma in the emergency department.

WHERE CAN YOU FIND AN ANAESTHETIST?

Anaesthetists work in nearly all departments of the hospital and some even work outside of the hospital too. Our natural habitat is the operating theatre but you will also find us on the wards, in pre-assessment or chronic pain clinics, on the labour ward, in radiology suites and in critical care. Anaesthetists work in a wide variety of roles ranging from pre-hospital care to teaching and research. Broad clinical exposure and strong interest in patient safety often leads consultant anaesthetists to develop leadership roles within the hospital. It is not uncommon to find anaesthetists in the senior management team of a hospital or trust.

As multifaceted professionals with a wide range of transferrable skills, no two anaesthetists are quite the same. A career in anaesthesia enables you to mould yourself to fit a plethora of different jobs. You may wish to work in a teaching or district general hospital, you may wish to pursue a particular clinical subspecialty or research interest – all of these options are available.
Safe care of patients in theatre starts with a thorough pre-operative assessment, either in the clinic or on the ward. This allows the operating team to make decisions on the appropriateness of the proposed procedure and if any additional resources may be required, such as a postoperative intensive care bed.

Pre-assessment enables the anaesthetist to establish a rapport with the patient and to identify any potential anaesthetic difficulties or pre-existing medical conditions. Some patients will require further investigation and optimisation pre-operatively and this may involve anaesthetic-led advanced physiology testing or expert advice from other medical specialties.

Having ascertained the necessary information, it is possible to quantify the risks of surgery and therefore formulate an appropriate management plan to provide the safest possible care. This may be very straightforward for healthy individuals having minor operations but can be extremely complex for unwell patients undergoing major surgery. Anaesthetists are responsible for explaining such risks to a patient and outlining the proposed management plan.

The choice of anaesthetic management for a particular case is often not clear cut and there may be a number of possible options available to safely facilitate surgery. For example, repairing a broken ankle can be appropriately performed under general anaesthesia, targeted nerve blocks, a spinal injection or a combination of these. The final choice of technique is determined by patient factors, surgical factors and anaesthetic factors but is an agreement between the patient, their anaesthetist and the surgical team.
In theatre, the anaesthetist becomes the patient’s carer and safety is paramount. Control of the patient’s airway, breathing and circulation are of particular importance. Close attention is paid to the patient’s condition during surgery and the anaesthetic tailored to each individual. Complex operations may require invasive monitoring such as transoesophageal echocardiography to monitor real time cardiac function, invasive arterial blood pressures or whole blood clotting effectiveness with thromboelastography. At the end of the procedure, the anaesthetist is responsible for ensuring full recovery from anaesthesia in a safe environment and ensuring adequate analgesia.

Not all patients need to be asleep for their surgery and anaesthetists are skilled at using regional nerve block techniques to anaesthetise discrete regions of the body. Local anaesthetic is deposited around major nerves or plexuses with the aid of ultrasound or nerve stimulators to produce numbness or analgesia. Regional techniques are commonly used for day-stay patients or those considered high risk for general anaesthesia. Some patients may have surgery performed under local anaesthesia alone.

Anaesthetists are responsible for planning and facilitating effective and safe postoperative care. This may require postoperative ventilation on the intensive care unit, topping up an epidural or planning discharge medications for a day case patient.

### ANAESTHETIC SUBSPECIALTIES

The majority of anaesthetists are responsible for a wide variety of theatre cases so their working week may range from quick turnover day cases for fit people to major complex vascular surgery in sick elderly patients. Along with this, many anaesthetists have one or more subspecialty interests, which further enhances the breadth of their clinical work.

#### Intensive care medicine

Intensive care medicine (ICM) treats the most critically ill patients in the hospital. An ICM doctor can provide advanced organ support and is responsible for coordinating the care of patients on the intensive care unit. ICM is high-tech, lifesaving care that interacts with all other areas of the hospital. At present most UK intensive care doctors come from an anaesthetic background, although some are physicians or surgeons.

Intensivists are experts at recognising and managing organ system failures. Anaesthetists have a detailed knowledge of physiology and a comprehensive understanding of pharmacology and monitoring techniques so are perfectly suited to work in a critical care environment. A good intensive care doctor also needs excellent communication skills, a firm grasp of ethical principles and an ability to manage people and resources. Effective and sensitive communication with families is essential in times of extreme stress associated with critical illness.

Training to become an intensive care doctor has changed recently with the foundation of the Faculty of Intensive Care Medicine in 2012. It is now possible to train purely in ICM (from ST3 onwards) or ‘dual train’ in conjunction with another speciality, such as anaesthesia, although this takes longer. More details are available on the Faculty of Intensive Care Medicine website (www.ficm.ac.uk). Anaesthetic skills will always remain essential and the
The majority of currently advertised consultant posts in the UK are for anaesthetists with allied intensive care qualifications.

**Resuscitation and trauma**

Anaesthetists are core members of the hospital trauma team, involved in the initial resuscitation of trauma victims in the emergency department and their ongoing care in the operating theatre. Some work outside the hospital in pre-hospital emergency teams to treat trauma victims on the roadside. Specific training programmes for anaesthetists or emergency medicine trainees interested in a career in pre-hospital medicine are currently being introduced. More information can be found on the Intercollegiate Board for Training in Pre-hospital Emergency Medicine website (www.ibtphem.org.uk).

**Obstetrics**

Two thirds of women giving birth in the UK will come across an anaesthetist in some capacity and most delivery suites have dedicated anaesthetic cover. We assess women in antenatal clinics to discuss methods of pain relief, anticipated anaesthetic problems or any other special requirements. Anaesthetists are responsible for performing labour epidurals to provide pain relief, as well as anaesthesia for surgical procedures such as caesarean section. The presence of anaesthetists in the delivery suite has been accompanied by a marked reduction in morbidity and mortality for both mother and baby. Obstetric anaesthetists are integral to obstetric high dependency units for mothers with significant co-morbid disease or for those who have experienced serious complications around childbirth.

**Paediatric anaesthesia**

Paediatric anaesthetists do not need to have trained as paediatricians or passed exams set by the Royal College of Paediatrics and Child Health. Paediatric anaesthetists gather their skills and knowledge through specific placements during their generic anaesthetic training, alongside at least one additional year of anaesthesia for children. Most hospitals will provide anaesthetic services for children to some extent but those under the age of one are normally treated in a specialist centre.

**Cardiac and thoracic anaesthesia**

Much like a paediatric anaesthetist, a cardiac anaesthetist is not first required to train as a cardiac surgeon or cardiologist. All trainees are exposed to cardiothoracic anaesthesia but to pursue a career it may be necessary to do additional years of specialist training in the UK or abroad. Many cardiothoracic anaesthetists in the UK practise mainly adult cardiac anaesthesia but some combine this with thoracic anaesthesia or paediatric cardiac anaesthesia.
Pain medicine

Pain medicine describes the management of patients with acute, chronic and cancer pain using physical, pharmacological, interventional and psychological techniques in a multidisciplinary setting. The Faculty of Pain Medicine comes under the umbrella of the Royal College of Anaesthetists. All anaesthetic trainees complete basic and intermediate training in pain medicine but to become a pain specialist requires additional units to be completed.

Acute pain management is a core skill of all anaesthetists. Techniques ranging from simple oral analgesics to epidurals and infusions of peri-neural local anaesthetic may be utilised to manage pain. Anaesthetist-led pain teams conduct ward rounds to identify and aid treatment of complex acute pain problems.

Pain medicine is a distinct and very different specialty to anything else in anaesthesia. Chronic pain conditions affect a large number of people and there is a great demand for pain management services. Pain specialists are experts in invasive treatment techniques such as nerve blocks, injection procedures and implantation of pain-relieving devices. They play a central role in multidisciplinary pain management programmes, working closely with psychologists and physiotherapists.

Regional anaesthesia

This involves anaesthetising parts of the body using targeted injections of local anaesthetic drugs. Regional anaesthesia may be used in conjunction with a general anaesthetic (for example, in shoulder surgery) or as a sole technique, particularly in sick patients where a general anaesthetic may be very risky. Regional anaesthesia is common in day surgery because it allows patients to walk as soon as possible after their operation. Recent advances in ultrasound technology have encouraged the utilisation of such techniques and are drawing more anaesthetists to specialise in this area.

ACADEMIA AND RESEARCH

Anaesthetists already have deep roots in scientific knowledge through studying for the Fellowship of the Royal College of Anaesthetists (FRCA) and their clinical application of science. Building on these foundations, anaesthetic trainees are well positioned to be involved in research focused on the improvement of patient care.

Opportunities exist for anaesthetists who wish to make a career of primarily academic work. A limited number of Academic Clinical Fellow (ACF) in Anaesthesia posts are available at ST3 level or it is possible to take time out of training to study for a higher degree such as an MD or PhD. The National Institute of Academic Anaesthesia was established in 2008 and is committed to the academic advancement of trainees whether they are purely clinically orientated or future physician-scientists.
Entry to basic training requires graduation from medical school and successful completion of two years of foundation training (or the equivalent). The training programme consists of four phases:

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<th>Core training (2 or 3 years) or ACCS (3 years)</th>
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<td>(2 years)</td>
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<td>(2 years)</td>
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There are two routes into anaesthesia - the direct route through Core Training or the Acute Care Common Stem (ACCS) route. Core Training is two years in duration (in Wales this is extended to three years) and is focused purely on anaesthesia and intensive care medicine. ACCS is a three-year training programme to enable a broader exposure to acute hospital specialties. The first two years of ACCS are spent rotating through emergency medicine, general medicine, anaesthesia and intensive care. The third year is spent providing training that will ensure the trainee meets the minimum requirements for entry into specialty training in their parent specialty. So for anaesthetic ACCS trainees this third year will be the equivalent of the second Core Training year. More information is available on the ACCS National Training website (www.accsuk.org.uk).

The whole anaesthesia programme is normally seven years for trainees taking the Core anaesthesia route, or eight years for those following the ACCS route. On completion of the training programme, the GMC awards a Certificate of Completion of Training (CCT) or Certificate of Eligibility for Specialist Registration [Combined Programmes] (CESR(CP)) which then allows the holder to apply for a consultant post. More information is available at http://www.rcoa.ac.uk/careers-training/training-anaesthesia/the-cct-vs-cesrcp.

**Basic level training (CT1-2)**

This is normally two years in duration and concentrates on foundations of anaesthetic practice and basic anaesthesia. Before a novice anaesthetic trainee can work without direct supervision they must pass the structured Initial Assessment of Competency which normally happens after about three months. Basic training includes three months of ICM and exposure to obstetric anaesthesia but the remainder is dedicated towards general anaesthesia and passing the Primary FRCA exam. Trainees who enter through the ACCS route complete their basic level training in three years.

Satisfactory annual assessment, appropriate workplace-based assessments and success in the Primary FRCA are required to progress to ST3. Application for ST3 posts is a competitive process.

**Intermediate level training (ST3-4)**

Intermediate training lasts two years and introduces specialist areas of anaesthesia including cardiothoracic and neuroanaesthesia. Trainees must pass the Final FRCA examination to be allowed to progress on to higher training.
Higher level training (ST5-6)

Higher level training lasts two years, of which least one year is spent on general duties. Some flexibility is possible to incorporate the special interests of an individual. Trainees must complete the essential units of training and may also choose to do one or more of the optional units. Higher level and advanced level training can be delivered flexibly depending on individual schools of anaesthesia. For example, a trainee could begin higher level training in ST5, undertake advanced level in ST6 and finish higher training in ST7. It is possible to arrange out-of-programme experience or training (OOPE or OOPT) at this stage. This may include studying for a PhD, anaesthesia in the third world or a specialist fellowship.

Advanced level training (ST7)

Advanced level training is aimed at preparing you for being a consultant. Trainees may choose to specialise in paediatric, cardiothoracic or neuroanaesthesia if they aspire to work in a tertiary referral centre. In preparation for becoming a consultant, learning is focussed on building expertise in specific areas of practice and greater exposure to the professional competencies such as leadership, team working and management.

Training in Ireland

The structure and nomenclature of anaesthetic training in Ireland changed in 2012. Specialist Anaesthesia Training (SAT) in Ireland now takes six years and is based in hospitals accredited by the College of Anaesthetists of Ireland.

The structure of training is similar to that in the UK; two years of basic training are followed by three years of sub-speciality training with a final advanced year to finish. At present both old and new schemes are running in tandem and we would recommend consulting the College of Anaesthetists of Ireland website for detailed information (www.anaesthesia.ie). The Committee of Anaesthetic Trainees (CAT) provide trainee representation and support (cat@coa.ie).
If you are considering training less than full time (LTFT) it is likely that you have other commitments or areas of your life to which you need to devote time, whilst also trying to get the most out of your training. Anaesthesia has a long tradition of supporting doctors who wish to train LTFT and of all hospital specialities is second only to paediatrics for numbers of part-time trainees. LTFT training programmes in anaesthesia have dedicated programme directors and are usually well organised, and most departments will have had experience of LTFT trainees. The sessional nature of anaesthesia facilitates a satisfying career without too much family disruption, compared with working LTFT in other specialties which may require dropping clinics and cross-cover of inpatients by colleagues in your absence. There is a comprehensive guide to LTFT available to download from the AAGBI website.
How Can I Find Out More?

If you have been inspired to join us on the exciting and rewarding career path of anaesthesia then it is time to do some homework!

Exposure to anaesthesia can be limited as a medical student and most people will want to know more about the speciality before applying for a job. How best to go about doing this depends on what stage you are at in your medical career. Undergraduates can consider doing a special study module or elective in anaesthesia to gain more exposure. Departments around the world are usually very willing to take students.

Limited numbers of four-month anaesthesia or intensive care posts are available on foundation programmes. These are often highly sought after as they offer great experience and learning opportunities with close consultant supervision. If you are applying for foundation jobs and considering a career in anaesthesia then these offer a brilliant opportunity to gain exposure to anaesthetists and their work. Current foundation doctors can organise ‘taster weeks’ in specialties in which they may be interested, so why not consider anaesthesia or critical care?

Anaesthetists are involved all over the hospital so whether you are a student or a foundation doctor you are sure to come across them, wherever you are working. We are a friendly profession so will not mind being approached by an inquisitive and interested potential colleague! Talk to anaesthetic trainees as well the consultants, as they will tell you what training is really like and how they secured their training rotation.

Information about a career in anaesthesia, the training and exams involved is available online. We have included a list of useful contacts towards the end of this document. If you want to discuss your aspirations then find out who the College Tutor for anaesthesia is in your hospital and arrange to meet them. These are consultants who also represent the Royal College of Anaesthetists and will have up-to-date advice on training and how to apply for jobs.

Regional and national careers fairs offer the opportunity to talk to doctors from a wide range of specialties in one room and offer advice from clinicians based beyond your local hospital.

Anaesthesia is a great career. Entry to training is competitive and the exams do require hard work but it is worth it in the end. The more experience you can get and the more you can find out before you apply, the better choice you will be making for yourself and the more likely you will be to secure a job.
USEFUL CONTACTS

Group of Anaesthetists in Training (GAT)
c/o The Association of Anaesthetists of Great Britain and Ireland
21 Portland Place, London W1B 1PY
Tel: 020 7631 1650
Email: gat@aagbi.org
www.aagbi.org/professionals/trainees

Association of Anaesthetists of Great Britain and Ireland (AAGBI)
21 Portland Place, London W1B 1PY
Tel: 020 7631 1650
Email: info@aagbi.org
www.aagbi.org

The Royal College of Anaesthetists (RCoA)
Churchill House, 35 Red Lion Square, London WC1R 4SG
Email: training@rcoa.ac.uk
www.rcoa.ac.uk

The College of Anaesthetists of Ireland
22 Merrion Square North, Dublin 2, Ireland
Tel: +353 1 2650600
Email: info@coa.ie
www.anaesthesia.ie

Committee of Anaesthesia Trainees (CAT)
c/o The College of Anaesthetists of Ireland
22 Merrion Square North, Dublin 2, Ireland
Email: cat@coa.ie
www.anaesthesia.ie/index.php/training/committee-of-anaesthetist-trainees

The Faculty of Intensive Care Medicine
Churchill House, 35 Red Lion Square, London WC1R 4SG
Email: ficm@rcoa.ac.uk
www.ficm.ac.uk

Faculty of Pain Medicine of The Royal College of Anaesthetists
Churchill House, 35 Red Lion Square, London WC1R 4SG
Email: fpm@rcoa.ac.uk
www.fpm.ac.uk

NHS Careers
www.nhscareers.nhs.uk