From the Editor

Will Harrop-Griffiths, RCoA Member of Council and Guest Editor, 25th Anniversary issue

Hopefully, it will not come as much of a surprise to any of the 17,000 Members and Fellows of the Royal College of Anaesthetists, and in particular to any of the 80% of these who reported that they read the Bulletin in our recent membership survey, that 2017 sees the 25th Anniversary of the RCoA.

This edition of the Bulletin is part of our programme to launch our anniversary celebrations, and therefore contains a number of articles that look back over the past 25 years and look forward to the next 25 years and beyond. Twenty-five years may not seem much when compared with other institutions such as the Royal College of Surgeons of England (217 years old), Royal College of Physicians (499 years old), or indeed the college (703 years old) that saw me start my medical training back in the last millennium, but it is a significant landmark in the development of our specialty that deserves some note and the odd bit of flag waving (see Sharon Drake’s article on our Anniversary plans for details). History lovers will enjoy reading Tony Wildsmith’s article on the origins of the College and Paul Clyburn’s article on the AAGBI and the RCoA, which looks at the events from a slightly different angle. We are not the only ones celebrating a significant anniversary next year: the Australian and New Zealand College of Anaesthetists (ANZCA) also celebrates its 25th Anniversary, while our own Faculty of Pain Medicine sees its 10th Anniversary – there are articles by David Scott and Christine Ball (ANZCA President and Honorary Curator) and by Kate Grady and Daniel Waeland – FPM Deans) on these two organisations.

While looking both forward and back, we have articles that address the anniversary theme from the viewpoints of the Faculty of Intensive Care Medicine, the Lay Committee, trainees, SAS doctors and the RCoA’s Global Partnerships. Pierre Foëx looks back at 40 years of the Final FRCA course. Melanie Jones provides us with a brief history of Women in Medicine, and the notable academic trio of Moonesinghe, Grocott and Pennington-Ridge take a look at what may happen to Academic Anaesthesia in the next 25 years and beyond. Meanwhile, Ron Jones takes a characteristically quirky look at the first 99 editions of the Bulletin [the current issue being its 100th]. I report an interview with J-P van Besouw, our immediate Past President, Jaideep Pandit and Kathleen Ferguson provide us with an update on SALG, and a new contributor to the Bulletin – the potentially pseudonymous Sebastian Parrott – provides us with three short, dysphoric pieces on what the future of anaesthesia might hold.

All in all, I hope that this 100th edition of the RCoA’s Bulletin offers all of you an interesting summary of what the last 25 years have meant to the College and to anaesthesia, and what the future might hold for us, for our patients, and for anaesthesia, pain medicine, intensive care medicine, perioperative medicine and whichever other clinical direction we find ourselves travelling in.

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Cover image: John Snow (1813–1858) was a Member of the Royal College of Surgeons whose work provided opportunities to conduct research into the developing field of anaesthesia. This bust of John Snow sits in the RCoA’s Council Chamber and, for this 100th issue of the Bulletin, represents us celebrating the history of anaesthesia while also looking towards the future.
The President's view

25 not out – the College achieves a major milestone in its history

It is a tremendous honour for me to be President of the Royal College of Anaesthetists as we approach the 25th anniversary of receiving our Royal Charter. The past quarter of a century has seen anaesthesia and our College grow hugely in stature and so, on the eve of this pivotal moment in our history, I am devoting this edition of President’s View to some personal reflections on the past 25 years, combined with an overview of the College today and some challenges for the future.

Looking back

In 1992 I was a fresh-faced senior registrar (ST6 for younger readers) on rotation at the Royal Brompton Hospital and, to be honest, I wasn’t aware of the work going on elsewhere in London to secure our specialty’s future. However, I now know how indebted we are to our then College Council led by Alastair Spence, Cedric Prys-Roberts and David Hatch (as President and Vice-Presidents respectively) for the vision they showed in guiding the College to achieving Royal status. Starting under Michael Rosen’s Presidency, over a period of less than five years, the College was transformed from being a Faculty of the Royal College of Surgeons – operating out of a few rooms – to being a fully independent Royal College housed in its own premises.

It took considerable effort – and courage – to leave the security of Lincoln’s Inn Fields, where the fledgling College, and previously the Faculty of Anaesthetists, had been based since 1948. Leaving home is exciting but also daunting, and records from the time show that to become independent, the new Royal College needed to raise funds – some £5 million – to achieve its goals, including buying its first home in Russell Square. This was achieved in record time thanks to benefactors from the pharmaceutical industry and the generosity of many individual Fellows who contributed independent practice fees to our charitable foundation. This was all the more remarkable when we recall that in the early 1990s the UK was in recession and money was scarce (sounds familiar?). The innovative efforts of the fundraising team, led by Professors Rosen and Hatch, were key in reaching the fundraising target, along with the support of the AAGBI, led by its President, Tom Boulton. Incidentally, we have Tom to thank for the College Coat of Arms with which we are all now so familiar.
The RCoA in 1992 was very different from what it is now. With around 4,000 Fellows and no associated Faculties, it was considerably smaller than our current 17,500 membership (21,000 including FICM and FPM). This was reflected in staff numbers, with around 20 when we first moved into Russell Square, compared to nearly 100 people today. The Council was smaller: 20 elected members versus 24 today, supported by the then Regional Educational Advisers and our enduring cohort of College Tutors.

This structure served the College well, as our work then revolved predominantly around the delivery of training and examinations. Professional standards were in the early stages of being defined, led by the Quality of Practice Committee, clinical audit was just being talked about, and quality improvement science, which occupies increased amounts of time and resources today, was a concept far in the future.

The College in 1992 had the ultimate say in constructing and delivering postgraduate curricula, approving training environments and delivering examinations. A visit from the members of the Hospital Recognition Committee was anticipated with some trepidation – not unlike a CQC visit today – with the College empowered to remove trainees and de-recognise hospitals for training purposes if they were offering poor training. This authority has long since been lost by the Royal Colleges, and it is only in recent years that we have regained some of our previous influence in this crucial area that affects all of our trainee members. Finally, the FRCA was a three-part examination in 1992, oral examinations were only just starting to be standardised, and the OSCE was in a very early stage of development. With pass rates being 40% at best, it was common for trainees to pay several visits to the examinations before achieving the Fellowship.

One aspect of the College that has certainly progressed in the past 25 years is greater diversity in our representation. In 1992 our Council and Board of Examiners was predominantly white and male. Today the gender and ethnicity profile of those in leadership roles much better reflects the demographic profile of our membership. In 1992 less than 5% of FRCA examiners were from ethnic minorities and less than 10% were female. In 2016 these figures are 17% and 30% respectively. To put this in context, 25% of our membership in the recent member survey was from ethnic minorities and 32% were female.

The College today

Today our College is virtually unrecognisable from what it was at its birth in 1992. Besides the obvious expansion in membership and staffing, the College has developed new workstreams, with our Clinical Quality Directorate, recently established Communications and External Affairs Directorate, and not forgetting the Faculties of Pain Medicine and Intensive Care. This reflects the increasing need to promote all aspects of anaesthetic practice and associated disciplines, and to engage more effectively with our membership and our patients, and with other stakeholders involved in delivering, regulating and funding healthcare. We hope this will make the College more accessible and responsive in this fast-moving, multi-media world.

Our research portfolio, amounting to some £4.2 million, co-ordinated by our Health Services Research Centre working in partnership with the National Institute of Academic Anaesthesia, is leading the way with patient-centred, quality-improvement-based studies, which will undoubtedly be strengthened by our new Clinical Trials Network.

As in 1992, examinations and training remain core College business. These aspects of our work are highly regarded both in the UK and internationally, by other Colleges and by regulators as being exemplars in many aspects of education and assessment practice.

The College estate is the envy of our peers, with spacious, modern headquarters in Red Lion Square that we own outright. Financially we are secure, with cashflow and investments well placed to meet our strategic aims and future challenges in order that we can further support our members, and their patients.

Finally, as in 1992, we are extremely fortunate, despite the extremely challenging landscape in which we practise, to have a continuing number of members willing to contribute...
enthusiastically to the work of the College. Without their selfless support, the College would not be the robust, thriving organisation it is today, so my personal thanks go to everyone who works or has worked on behalf of the College in the past 25 years in whatever capacity.

...and the future?
If we are to live up to the legacy of our predecessors, we cannot be complacent. The NHS is under unprecedented pressure and, as an essential part of secondary and tertiary care, anaesthesia, intensive care and pain medicine needs to dig deep to maintain high-quality services for the benefit of patients. The College’s role is to champion innovative practice that meets this aim, but also to warn and advise our national political leaders when lack of resources are an obstacle to providing safe and sustainable patient care.

Perioperative medicine (POM) as a concept is gaining momentum with the specialty from the grass roots upwards, and this surely must be a key part of our future. Emphasising as it does the pivotal role of the physician-anaesthetist in managing increasingly frail, complex patients in partnership with other healthcare professionals, this initiative aligns perfectly with current Government policy and puts the specialty and the College at a distinct political advantage. Our first-ever College strategy, which heavily references POM, will hopefully keep us on course and prevent us from being deflected by having to react constantly to external events.

The pressure on the anaesthesia workforce, as highlighted by our recent census, will be an issue that we must address if our specialty is to meet future expectations. This will require us to lobby political decision makers responsible for training budgets, as well as to contribute to the debate and highlight the consequences of limiting freedom of movement of health workers in the post-Brexit era.

The same census also highlighted the problem of our increasingly ageing anaesthetic workforce, considered in detail in the recent AAGBI report ‘Age and the Anaesthetist’. A culture change by employers is urgently required to facilitate portfolio careers for anaesthetists if they are to remain able to provide safe and sustainable perioperative care late into their seventh decade. Alternative staffing options, including expansion of the PA(A) workforce, may also need to be considered but, as we and the AAGBI have emphasised, this is only a viable option if accompanied by statutory regulation.

To conclude where we begun with a cricketing metaphor, the RCoA innings has only started but, despite some hostile bowling, we have bided our time, defended well, and are now starting to play some confident shots with increasing frequency.

At 25, we are confident of making 50 and then onwards to our first century!
Patient Safety Conference, Edinburgh

Date: 30 November 2016
Venue: Royal College of Physicians of Edinburgh

A ROYAL OCCASION
The Safe Anaesthesia Liaison Group is delighted to announce that the Royal College of Anaesthetists’ Royal Patron, HRH The Princess Royal, will be attending our annual Patient Safety Conference in Edinburgh this year.

The event will be held at the Royal College of Physicians of Edinburgh on 30 November 2016.

This is a single-day meeting which consists of lectures, each of which is followed by ample time for discussion and networking opportunities. It is intended for doctors engaged in clinical anaesthesia, pain management and intensive care medicine who have an interest in improving patient safety.

Experts will present up-to-date information on a wide range of patient safety related topics, and we are delighted to confirm that the Chief Medical Officer for Scotland, Dr Catherine Calderwood and Shona Robison, MSP, Cabinet Secretary for Health and Sport will both be addressing the conference. Please see the event page on the Royal College of Anaesthetists’ website for the programme and further details (http://bit.ly/salgPS).

To book a place on the event, please visit http://rcoa.it/booknow. You will be taken to the Event Online Booking system where you simply log in or register to complete the booking process.

Registration Fee: £215 | Event Organiser: Professor J Pandit | events@rcoa.ac.uk | Twitter #SALGPS

Dress code: day dresses and lounge suits
News in brief

News and information from around the College

Delivering global partnerships to improve anaesthesia

Through our new Global Partnership Strategy [http://bit.ly/GPstrategy], the College is committed to forging and developing international partnerships with doctors and health education providers in multiple countries to deliver high quality anaesthetic training to local doctors and clinicians.

Only through this close collaboration with professionals, national bodies and health ministries (or equivalent), can we work to strengthen international healthcare systems to ensure the long term stability and access to healthcare for previously excluded patient groups.

One example of our most recent international partnership work is the signing of a Memorandum of Understanding (MoU) with the Hong Kong College of Anaesthesiologists in August this year. This MoU is set to enhance the development of standards for anaesthesia in Hong Kong through a framework of collaborative work in education, training, assessment, examinations, continuing professional development, e-learning and research.


‘We’re pleased to be working with our Hong Kong colleagues to share our knowledge and experience of developing standards for anaesthetic education, training, assessments and continuing professional development. There’s a considerable amount of work taking place on the back of our new Global Partnership Strategy and I look forward to updating members on this over the coming months.’

DR JEREMY LANGTON
VICE-PRESIDENT AND CHAIR
GLOBAL PARTNERSHIPS COMMITTEE

Forging global partnerships: The World Congress of Anaesthesiologists

The World Congress of Anaesthesiologists meets every four years and the timing couldn’t have been better coming just one month after the launch of the College’s new strategy. The strategy sets a bold vision for our work in the UK and globally and was warmly received by delegates, societies and other Colleges.

With over 6,000 delegates in attendance, the major theme of the Congress was The Lancet’s 2015 Commission on Global Surgery which found that over five billion people lack access to safe and affordable surgical and anaesthetic care and that a further 2.2 million anaesthetists, surgeons and obstetricians will be required worldwide to satisfy this demand. The RCoA’s strategy states ‘To meet this challenge we are committed to working in partnership with organisations to improve healthcare provision across the world’.

In working towards that point in our strategy and, during a packed Congress programme, a small College delegation led by president Liam Brennan, signed a memorandum of understanding with the Hong Kong College of Anaesthesiologists on exams and training and convened a meeting with the presidents of anaesthetic Colleges around world to discuss better partnership working. Through our attendance at the Congress and our collaborative activities around its fringes, the College ensured that UK anaesthesia was well represented on the global stage.
Driving Perioperative Medicine

Attitudes and experiences survey
In early 2017, we are due to survey College members to find out their attitudes to and experiences of perioperative medicine. Responses will not only inform the College’s POM work, but will also provide a basis against which to measure the development of perioperative medicine over the coming years.

POM Leads’ event
On 31 January 2017 an all-day meeting, Developing perioperative medicine across the UK, is being held at the College for all POM Local Clinical Leads. These Leads play a crucial role in the delivery of the College’s POM programme and it’s through them that best practice in perioperative medicine can be effectively developed and spread. The list of current RCoA Local Leads can be found on the POM microsite, along with the job description for each role. Please contact the Lead within your hospital – if a Lead has not yet been identified and you are interested in the role please contact us on the email address below.

Examinations
The examinations team has been busy over the past few months preparing and managing the exam processes for the current 2016–2017 academic year. With 435 candidates having sat the Primary MCQ and another 406 sitting the Final Written examinations in September, it’s been another busy year. The next Primary OSCE/SOE takes place w/c 7 November. There remains one further sitting of the Primary MCQ exam for 2016, which is scheduled for 15 November, while the next Final SOE takes place w/c 5 December. Then following the seasonal break there are further sittings of the exams scheduled for January, February, March, May and June 2017.

Exam results are published on the website (http:/ /bit.ly/2cyFpNm), following the relevant standard setting process.

Over the months preceding these exams, examiners meet at the College to write and select new questions for their relevant sections. Discussions also take place between the groups of examiners to avoid question clashes and ensure questions reflect a wide coverage of the relevant curriculum for each exam. The College provides various resources to assist exam candidates in preparing for their exams – all of which are available on the College website (http:/ /bit.ly/2cyBksL). The College’s YouTube Channel (http:/ /bit.ly/rcoaYouTube) also hosts a series of exam videos; the OSCE spotlight videos and Primary and Final SOE videos are particularly helpful to candidates preparing for the forthcoming OSCE and SOEs.

PERIOPERATIVEMEDICINE@RCOA.AC.UK
WWW.RCOA.AC.UK/PERIOPERATIVEMEDICINE
Brand new College

Since being made public at our College Tutors’ meeting and Summer Symposium in June this year, our new logo and brand continues to be rolled out across the College.

Produced after a consultation period of several months, the new brand and logo have been designed to instil a sense of trust in the fact that, as a professional specialty, anaesthetists are all doctors and have the patient’s needs at heart. The ‘A’ symbol within the new logo contains two circles, inspired by the relationship between patient and anaesthetist. This suggests that we are ‘by your side’ and represents the vital supportive and collaborative role the College plays for members, patients and healthcare in general. The College crest will be retained for ceremonial uses, including examination certificates and formal documents.

Our new brand clearly communicates what we do as a medical Royal College, why we do it and how we do it. Supporting our five-year strategy, it makes clear our pursuit of excellence, our focus on supporting our membership, the value we place on collaboration and our vision of the central role anaesthesia plays in the future of healthcare. As members, you would have also noticed the new brand at conferences, events and on publications, social media and websites. We hope you like it.

Visit our 25th Anniversary website for information on all our planned activities

WWW.RCOA.AC.UK/RCOA25
Study launched to improve patient outcomes

Earlier this year, the Health Service Research Centre, working on behalf of the RCoA and a broad range of stakeholders, launched a new initiative aimed at improving patient outcomes from major surgery. The Perioperative Quality Improvement Programme (PQIP) has been established to measure complications, mortality and patient reported outcome from major non-cardiac surgery. The ambition is to deliver real benefits to patients by supporting clinicians in using data for improvement.

PQIP will begin pilot data collection on 7 November. Over 70 hospitals have registered their interest in the initiative. PQIP has received national research ethics service approval for the PQIP database and has also applied for Health Research Authority approval and National Institute for Health Research Portfolio adoption for the baseline study, which will establish complication and failure to rescue rates in UK hospitals.

The study will monitor five patients per week selected at random to be recruited from each participating hospital. The PQIP team will work with local leads to support patient recruitment. All patients will be asked to provide consent and to complete follow-up questionnaires via either telephone or email, with data collection required on the day of surgery, day one, day three, day seven and at discharge from hospital.

Clinical Quality update

The Guidelines for the Provision of Anaesthetic Services (GPAS) [www.rcoa.ac.uk/gpas2016] document includes chapters developed using a new rigorous, evidence-based process that involves a variety of stakeholders. The new process was accredited by National Institute for Health and Care Excellence (NICE) [www.nice.org.uk] in 2016. Three chapters using the new process: Chapter 2: Preoperative Assessment and Preparation, Chapter 4: Postoperative Care, Chapter 5: Emergency Anaesthesia Services. By 2019 the complete GPAS document will have undergone the NICE accredited process. If you would like to be involved or know more, please contact gpas@rcoa.ac.uk.

The Safety Anaesthesia Liaison Group (SALG) [www.salg.ac.uk] is hosting the annual Patient Safety Conference in Edinburgh on 30 November [http://bit.ly/2cyUaQk], with special guests Royal Patron HRH The Princess Royal; Chief Medical Officer for Scotland, Dr Catherine Calderwood; and Shona Robison, MSP and Cabinet Secretary for Health and Sport. Delegate places are selling fast, so please book here.

The Anaesthesia Clinical Services Accreditation (ACSA) [www.rcoa.ac.uk/acsa] scheme launched in June 2013 and has since developed into a streamline peer review programme with 13 accredited sites and 78 anaesthetic departments engaged. The Clinical Quality Commission recognises the potential value of clinical service accreditation as information sources to support its inspections. ACSA has been approved as an official information source.
Revalidation for anaesthetists

Revalidation and CPD since Bulletin Issue 1

Chris Kennedy, RCoA CPD and Revalidation Co-ordinator

The first issue of the Bulletin was published in May 2000, and in the 16 years – and 99 further editions – since then, revalidation has been launched, accompanied by a variety of resources developed by the College to assist doctors in meeting their supporting information requirements. One popular example is the guidance on collecting colleague and patient feedback, and a number of members have told us how they have been using the RCoA patient feedback questionnaire. This is available in Word format on our website so that it can be edited to include the name of the doctor for whom feedback has been requested.

Since the launch of revalidation, the College has also provided a helpdesk service that can provide generic advice, and through which users can get help with specific circumstances by reference to a team of senior clinicians who act as specialty advisors. In recent months, the majority of enquiries received have been about returning to anaesthesia after a period of absence, and so, in conjunction with the Remediation Group of the Academy of Medical Royal Colleges (AoMRC), we have been developing extensive updated advice on this topic that will shortly be available in the Revalidation Guidance section of our website.

Issue 1 of the Bulletin described how the College’s first Continuing Education and Professional Development (CEPD) system had been introduced on 1 April 1995, and how the five years since then had acted as a testing ground to make further refinements: ‘Valuable lessons have also been learnt, both from the practicalities of running the system and from the experiences gained by other organisations involved in the field of CEPD.’ This inaugural issue concluded that doctors should participate in a variety of CPD activities and, whilst this core principle remains the same in Issue 100, this area of the College’s work has been continually evolving. The CPD Online Diary was launched in August 2011 and it now has in excess of 8,000 registered users, whilst the CPD web app, which followed in September 2014, averages approximately 1,000 visits per month. Looking ahead, over the next five years we will be integrating our technology by developing a lifelong-learning educational online hub, including the trainee e-Portfolio, clinical logbook and the CPD systems, to support members throughout their career and help meet their needs for revalidation.

Issue 1 of the Bulletin also encouraged trusts to make adequate provision for the funding of study leave, and it is hoped that events that have been through the approvals process – and that subsequently get featured in the CPD Online Diary, CPD web app, and on the College website – can be used in support of these requests. Approval is given following an independent review process adhering to criteria set by the AoMRC and overseen by the CPD Board, and some extracts from the annual quality assurance report of the scheme will be included in the next edition of the Bulletin.

Revalidation was launched on 3 December 2012, with the period for revalidating all doctors who held a licence to practise then running until 31 March 2018, and with this being a milestone edition of the Bulletin, this article has been reviewing the current landscape with the situation back in May 2000.

Looking to the future, two important milestones will be the publication of national reports that evaluate the impact of revalidation, one by Sir Keith Pearson in early 2017, and one by the UK Medical Revalidation Evaluation Collaboration in 2018, led by Plymouth University Peninsula Schools of Medicine and Dentistry. In response, and as we start the journey towards Issue 200 of the Bulletin, we will continue to develop a variety of resources to assist doctors in their revalidation.
In 2017 the College will be 25 years old – in human terms, old enough to have lived a bit, to have had a few experiences both good and bad, to have gained both in wisdom and in the potential for a long life. Several events took place in 1992 that we can see echoes of today: Bill Clinton was elected as US President, the Maastricht Treaty to integrate Europe was signed and the first nicotine patch was invented. As Ecclesiastes 1:9 puts it: ’What has been will be again, what has been done will be done again; there is nothing new under the sun’. There will be many expert recollections and opinions looking back on how the specialty has developed since the inception of the College, so we thought we would look to the future and consider what developments there might be over the next 25 years.

The achievement of a Royal Charter put the College on a par with the other medical specialties, and gave it control over curricula, training, exams and the professional development of its members. We are disheartened, however, to learn that the public is seemingly not aware that anaesthetists are medically trained. One of the objects in the College’s Royal Charter relates to educating the general public in all matters relating to anaesthesia. The 25th anniversary year is a wonderful opportunity to publicise the work that the College and its members do, but these efforts should continue into the future. Plans are in hand for collaborations with The Royal Society on their ‘Café Scientifique’ informal gatherings and the Annual Schools Science Conference.

Anaesthetics is the largest single hospital specialty in the NHS, but the College has pointed out that it is a shortage specialty, with trusts relying particularly heavily on locums. The President is on record as saying that no other doctor can do the anaesthetist’s job, because their skills are not part of the generic skill set of doctors. Is there a need for a recruitment drive to attract more medical students into the specialty, with information sessions and workshops? Should the role of Physicians’ Assistant (Anaesthesia) be developed? Supervised by consultant anaesthetists, PA(A)s can carry out procedures for which they are authorised, but need to be monitored and regulated.

The perioperative medicine programme, still in its infancy, will put anaesthetists in the forefront of the hospital team if it develops in the right way. A perioperative medicine curriculum is being developed to ensure that trained professionals are able to carry out this important work.

Another of the objects set out in the Royal Charter is to advance, promote and carry out research into anaesthesia and related subjects. This ties in with another 25th anniversary goal – to improve outcomes for patients through the use of quality improvement projects. Initiatives such as the National Emergency Laparotomy Audit (NELA) and the Perioperative Quality Improvement Programme (PQIP) are major projects and may in future become the norm, rather than just pilots. Training in leadership and management skills will be needed to help persuade colleagues to adopt the outcomes of such projects, with the added benefit of enhancing professional development.

Modern technology has developed considerably since 1992, with the advent of simulators, apps, smartphones, laptops, tablets and social media. Technology is fast developing, and the use of social media has rocketed. The College uses both Facebook and Twitter for communications; the latter is also being tested for use to gather questions and answers to put to the session chairs at College educational events. This use of modern technology provides instant feedback.

More and more often, there is news of some sort of robot being developed. ‘SpotMini’ is a robo-dog which can perform household tasks such as picking up fallen crockery and loading a dishwasher. A robot lawn mower is already on the market, and some surgical subspecialties use robots in operations. There has been talk of robots carrying out some of the basic functions of care.
assistants in care homes, providing much-needed attention for those who need it and filling a gap in the human workforce.

Is there a place for robots in anaesthesia – for example, taking on the preoperative assessment clinic? Two of the 25th anniversary goals on improving outcomes for patients are promoting fitness and reducing obesity. Would patients react positively to a robot telling them they are overweight and need to lose weight before their operation, or that they should stop smoking to maximise their chances of a good recovery? Could a robot explain the difference between sedation, local and general anaesthetic and give an opinion as to which one is suitable for the individual patient at the time? Probably not – partly because each case is different, and partly because robots lack empathy.¹ In the Lay Committee, we have discussed some of the questions that we, as patients, should be considering about dying, including whether or not we would want to have a particular treatment if it was offered. Would a patient ever feel comfortable about having such conversations with a robot? What would happen if we asked it a question it could not answer? At least a human doctor can reply in a sympathetic manner, even if they don’t know the answer. Drugs would still have to be prescribed by a doctor, but could a robot be loaded up with appropriate medication and measure it out as required? Another of the 25th anniversary goals is the multidisciplinary management of pain. Could a robot be part of this team?

Of course, this is not the only technical development that will have a significant impact on the role of the doctor in years to come. Information technology will lead to further fundamental changes to healthcare. Electronic records will eventually become available in every care setting. Patients will access them, share them and use them to shape care in new ways. New medical devices could mean an ambulance arrives to pick up a patient before – not after – a heart attack, having received a signal sent from their mobile phone.

There are 40,000 health apps now on iTunes and innovations will come increasingly rapidly. Heart rates and blood pressure will no longer be a matter for the doctor – patients will know and monitor their own. Data sharing between doctor and patient means power sharing too. We have all got to face up to issues, including ensuring access for everyone to such developments. And yet the thing that the majority of patients value most highly is being able to communicate with a doctor who is interested and engaged in their health and wellbeing. It seems ironic that the NHS – the most human of organisations [after all, it is the largest employer in the UK] – is littered with the trappings of a commercial set-up. We hear all the talk of being patient-centred yet the metrics all talk about ‘never events’, where patients become outputs; their health outcomes, products; our hospitals, factories. And while we rush around to become more ‘efficient’, turning all interactions with patients into commodities, the really clever organisations (such as Apple, Starbucks and Nike) turn their commodities into an experience and develop a culture around them. If they can do that for coffee and trainers – imagine what we could do with healthcare!

¹And so do some surgeons! [Ed]
Staff and Associate Specialist (SAS) and Specialty Doctors

SAS doctors – the future...

Kirstin May, Chair, SAS Committee and RCoA Member of Council
Lucy Williams, RCoA Member of Council

‘Ambition is the path to success. Persistence is the vehicle you arrive in’
– Bill Bradley

College remit and membership
The Royal College of Anaesthetists is the professional body responsible for the specialty of anaesthesia throughout the United Kingdom. It welcomes as Fellows and Members all grades of doctors practising the art and science of anaesthesia; there is a membership category for all practising anaesthetists. Contrary to popular belief, there is no wine cellar paid for by subscriptions, and educational events are not run for profit. Membership gives access to the paper and online versions of the British Journal of Anaesthesia (BJA), now the number-one international journal for the specialty, as well as to BJA Education and the College Bulletin. It also provides access to an online CPD record and the College’s e-learning programme, and therefore represents excellent value for money.

The College is not a trade union but, in pursuing its principal responsibility to ensure the quality of patient care through the maintenance of standards, it defends the interests of all practising anaesthetists. It works with other medical royal colleges to develop standards and guidance, but also represents anaesthetists in the rapidly changing world of health politics. Many SAS anaesthetists come from abroad, and developing a relationship with the College can help these doctors to integrate into the UK framework of professional standards and NHS culture. College educational material and events ensure that easily accessible, high-quality education, often provided by national and international experts, is available to all anaesthetists.

The College is very aware of the valuable contribution of SAS anaesthetists (and other anaesthetists who are neither consultants nor trainees), who make up 22% of our workforce. SAS anaesthetists are welcome to attend all College events, take an active part in College life, participate in research and – if Fellows – to become examiners. They have representation on many College committees and have seats with full voting rights on College Council. SAS anaesthetists have their own Committee at the College to further SAS issues, and the views of SAS anaesthetists are represented at the Academy of Medical Royal Colleges.

Leadership for all
‘A leader is one who knows the way, goes the way, and shows the way’
– John C Maxwell

In the past the SAS grade was deemed to be a pure service grade, often perceived as a dead-end grade for doctors from abroad, for doctors who struggled passing postgraduate exams,
or for doctors perceived for other reasons as ‘failed’. This has gradually changed, and there is a new generation of doctors who have actively chosen to enter the SAS grade for a multitude of reasons. Current difficulties recruiting and retaining SAS doctors are likely to continue and indeed increase in the future. It is therefore paramount for employers to recognise the need to ensure that posts for SAS doctors are suitably attractive and allow for career development and progression. The requirement for strengthened appraisal and revalidation has given SAS doctors not only the right, but also the duty to pursue their professional development. Any reluctance in the past to allow SAS doctors time for CPD has been superseded by guidance from NHS Employers to grant SAS doctors the same rights to professional development as consultants. The SAS charter published in 2014 and the 2008 Specialty Doctor contract enshrine the right to SPA time and acknowledge the potential the SAS grade has to take on leadership roles in the wider NHS. An area identified for improvement is the appropriate attribution and coding of work done by non-consultants. It is not only just and fair to be recognised for work done, but also in the interests of the employing organisations to attribute activity and outcomes to individuals correctly.

With rights come responsibilities. SAS doctors can no longer just turn up for the core clinical work; they have to take an active role in healthcare and see the bigger picture. Some may find this an intimidating prospect. It is worth remembering that most SAS doctors teach clinical skills already. The most important part of teaching is arguably role-modelling, so most SAS doctors have experience in local leadership already. This can be the first step to widening one’s perspective and influence on a future generation of doctors.

At the time of writing, the political situation is in a state of flux. However, the NHS relies on staff from abroad, both from the EU as well as non-EU countries. This is particularly the case with SAS doctors. It is important that anaesthetists from abroad have a suitable introduction to UK healthcare, NHS culture and GMC expectations. However, perhaps we could learn more from staff coming with fresh eyes to our healthcare system and harness their varied experience, not just in terms of clinical knowledge but also of giving us a fresh perspective to reconsider how healthcare can best be delivered.

To quote Dr Amit Kochhar: ‘In the old days, leadership was something done to SAS doctors, and never done by them’. Those days are over.

Contact
We are always keen to hear from other SAS doctors at sas@rcoa.ac.uk.

References

‘Congratulations to the RCoA for 25 years of dedication to the education of anaesthetists and unparalleled improvement of safety and quality of patient care. We wish you all the best going forward with perioperative medicine’
The Faculty of Intensive Care Medicine

A potted history in four parts

Daniel Waeland, Head of the Faculty of Intensive Care Medicine

1 Germination
In 1992, the Anaesthetists, Physicians and Surgeons formed the Joint Advisory Committee for Intensive Therapy (JACIT), helping to formalise UK training in intensive care medicine (ICM). JACIT transformed into the Intercollegiate Board for Training in ICM (IBTICM) in 1996 and, three short years later, the Government amended the European Specialist Medical Qualifications Order to add ICM as a specialty. Two years later, in 2001, the Joint training odyssey was born.

2 Groundwork
On 12 November 2009, a Steering Group met for the first time comprising the RCoA President, Judith Hulf, and three names that would go on to be a big part of the first phase of the Faculty Board: Julian Bion (first Dean), Tim Evans (first Vice-Dean) and Alasdair Short (Board member and first workforce lead). Following the hard work of this group, in June 2010, seven trustee Colleges approved the creation of the Faculty. An eighth trustee would be invited to join in 2012.

The newly formed Faculty Board and Secretariat oversaw the transformation of IBTICM into its Training and Assessment Committee, created the Professional Standards Committee and, most importantly for a fledgling Faculty, created a Membership Advisory Group to manage the process of Foundation Fellowship. 1,500 Fellows joined the Faculty in those first 12 months. By 2016, this figure has doubled.

3 Getting the job done
As our founding Dean, Julian Bion, rightly said, ‘The new Faculty is not a destination. It is a starting point.’ There was much to get started on. Just prior to the formation of the Faculty, the GMC had required IBTICM to begin work on a single rather than a joint curriculum. This curriculum, its training structure (including guidance on training in dual specialties), its equivalence process and its recruitment all had to be devised at great speed.

The Diploma in ICM (DICM) was re-formed into the GMC-approved FFICM in record time. An annual meeting ran for the first time in 2012 at the Royal College of Physicians. Important documents and statements on everything from revalidation to pandemics began to appear with the now familiar teal (the colour) and Candara (the font) Faculty logo.

This all needed some channels to communicate out to our membership and the wider world. The old IBTICM website was ‘reskinned’ in early 2011, developed in 2012 and completely overhauled in 2016. Critical Eye published its first edition in January 2012. Its sister edition for trainees, Trainee Eye, followed in March 2014. We joined the Twittersphere (@ficmnews) in February 2014.

4 Growing
From a strong foundation, wider and more proactive work became possible. Anna Batchelor was elected Dean in October 2013, and led us into the Academy of Medical Royal Colleges (AoMRC). A series of workforce censuses began with accompanying regional engagements designed to give the specialty national, regional and local data. Advanced Critical Care Practitioners joined the Faculty for the first time in 2015, following on from a good deal of work producing a curriculum, a conference and wider web resources for them.

The Faculty became the home for joint standards work with the Intensive Care Society, developing a range of professional releases, culminating in the first multiprofessional provision standards for the specialty. Guidelines for the Provision of Intensive Care Services (GPICS). On the training side, an e-Portfolio was introduced in 2014, a quality nexus began to be rolled out in 2015 and e-Learning for ICM (e-ICM) came into being in August this year.

There is still so much more that the Faculty wishes to do, and Carl, our new Dean, will write about some of our imminent priorities in his accompanying article. There are too many people to thank without doubling the length of this article, but I am glad that we have had many other opportunities to acknowledge our debt to them in other media.
Faculty of Intensive Care Medicine (FICM)

An overview of some future Faculty activities

Carl Waldman, Dean Elect, Faculty of Intensive Care Medicine

It is a privilege to be starting as Dean in November 2016. There have been a lot of recent medical and political changes, and it is becoming increasingly difficult to predict the future, but I would like to summarise some strands of work that we as a Faculty will be tackling.

Audit

The Intensive Care National Audit and Research Centre (ICNARC) agreed the need for a National Audit Critical Care Data Group (NACCDG). It will bring together key users and providers of critical care data to advise the Adult Critical Care Clinical Reference Group on the development, content and use of current and future national data within critical care to improve care, support research and drive changes in processes and outcomes.

We hope we can then ensure that the data that our units will be collecting more accurately reflect our needs in order to inform any major decisions about the need for critical care resources. NHS England via the Critical Care Clinical Reference Group has asked FICM to Chair the NACCDG and bring a UK-wide approach to the work.

Upcoming publications

‘Critical Futures’, a report based on a large canvassing of opinion through FICM fellowship and its partner organisations, will be published soon. It will be the first major ‘state of the nation’ report since Comprehensive Critical Care and its successor (2000 and 2004). The coming months will also see the publication of the Acute Respiratory Distress Syndrome guideline and a Version 1.2 of GPICS, including some minor changes and updates. Version 2 will follow in 2018. The FICM’s continued involvement with the Association for Cardiothoracic Anaesthesia and Critical Care and the Neuroanaesthesia and Critical Care Society of Great Britain and Ireland has been a very positive step in the discussion on how changes in the practice of ICM should be applied to the practice of Cardiothoracic and Neurosurgical ICM.

Smaller units

The Smaller Units Advisory Group has been formed with representation from across the UK under the chairmanship of Chris Thorpe. The group is considering issues that fundamentally affect smaller (or more remote) units, and will begin to produce materials during 2017.

End of life

It has been proposed that FICM lead a short-life working party, chaired by Mike Grocott, to address end-of-life care issues relevant to the practice of critical care in the UK. There are several drivers for this work, one of which is the increasing numbers of patients who have their deaths managed in intensive care units. It aims to summarise the current evidence; define recommendations for practice, policy, education and research in the area, to define the role of the FICM and other stakeholders in the communications issues relating to end-of-life care, and to define knowledge gaps in this area in order to inform research prioritisation.

Careers and training

A GMC review of these areas is due to go out for consultation this autumn. Major changes are expected to the structuring of curricula with the move towards an outcome-based framework. As the CCT in ICM is based on the Competency-Based Training Programme in Intensive Care Medicine for Europe, an outcomes-based curriculum, this is expected to be a positive move for the specialty and trainees, reducing the burden of assessment. The FICM has begun work on a careers plan for the specialty, and will be interacting with trainees on the wider issue of trainee morale as this goes forward.

Accelerated Access Review

As a member of the AoMRC, FICM has been involved in the case for prioritisation for translating research into clinical practice. We can all relate to the need for certain research ideas that we would like to see accelerated through regulatory care, through commissioning evaluation, through National Institute for Health and Care Excellence (NICE) approval, and then in to clinical practice in the NHS. We need to ensure that ICM-related research information is available for consideration throughout this accelerated process.
An abbreviated history

Daniel Waeland, Head of the Faculty of Pain Medicine
Kate Grady, Dean

Fitting a decade of history into one article is no easy feat, and so the two of us decided that an abbreviated timeline (with one divergence to Ancient Greece) would be the best way to give this overview. It cannot properly cover all aspects of ongoing Faculty business nor thank those to whom we remain indebted, but it will hopefully give a flavour of how we got to where we are now.

**Before 334 BC:** ‘All pain is one malady with many names’ – Antiphanes.

**2005:** RCoA Council approves the foundation regulations of the Faculty of Pain Medicine (FPM). On 6 December, the Founding Board of the Faculty meets for the first time and begins its two-year journey to forming the Initial Board of the Faculty.

**2007:** The Initial Board forms with Doug Justins as its first elected Dean. Foundation Fellowship opens and hundreds join.

**2009:** The FPM website launches. The Training and Assessment Committee (FPMTAC) and the Professional Standards Committee (FPMPSC) meet for the first time. Daniel joins.

**2010:** Dave Rowbotham becomes Dean. Transmitter publishes its first edition and the Board holds its first elections. Our first Education Meetings Advisor is appointed and oversees an overhaul of the Pain Medicine events programme. The trainee logbook is launched.

**2011:** The FFPMRCA Court of Examiners is now fully formed and begins the difficult tasks of populating a question bank and ensuring a fair and responsive standard-setting process for the exam. The first guideline is produced by the FPMPSC with many more to follow in coming years.

**2012:** Following the 2011 Pain Summit, for which FPM is a co-sponsor, we lead the development of ASK2QUESTIONS, a proposed primary care screening tool for pain. ‘The Good Pain Medicine Specialist’, guidance for revalidation, is published.

**2013:** Kate becomes Dean. The funding for e-PAIN, an e-learning resource for pain management, is received, and editors are appointed to begin creating content. The website is redeveloped. The first ever workforce census is launched. A working party improves and adds to the assessment system for training, including the case reports, and develops retraining guidance.

**2014:** A busy year. The first e-PAIN sessions go live. Careers content arrives on the website, along with the first phase of patient leaflets and a detailed evidence base for pain medicine. The FPM develops the educational structure for Pain in Secure Environments, and launches the trainee survey to aid a quality system for pain training. The FPM is also instrumental in setting up the cross-agency Pain Consortium.

**2015:** Another busy year. The Hospital Review Form (for remote quality management of training) is rolled out. The FPM becomes the home for the Essential Pain Management (EPM) initiative with courses held across Africa. This also leads to the start of the EPM Lite project, which aims to introduce pain management education into medical schools. ‘Core Standards for Pain Management Services’, the first set of multiprofessional standards of its kind is launched at a parliamentary reception alongside ‘Opioids Aware’, an essential prescribing resource.

**2016:** Barry Miller becomes Dean. The first Acute Pain Census is completed and analysis begins. The first forum for paediatric pain specialists is held, and the Faculty website undergoes a restructuring. Further patient leaflets (this time on interventions) are e-published.

**2017:** FPM’s 10th anniversary and therefore an opportunity to both celebrate past successes and look forward to the future.
Faculty of Pain Medicine (FPM)

Looking to 2017

Barry Miller, Dean Elect, Faculty of Pain Medicine (at time of writing)

‘It is difficult to make predictions, especially about the future’
– Unknown Danish Politician, 1937 (often attributed to Niels Bohr)

As I write this, I am Dean Elect, and this is my first contribution to the Bulletin in that role. It is a significant anniversary, for the College, in its 25th year, for the Faculty entering its 10th and, it is Friday morning, 24 June 2016 and the world seems a somewhat different place from what it did 24 hours ago. Not exactly a ‘Day of the Triffids’ moment, but there’s still an almost irresistible urge to check for mobile plants!

The role of any organisation is to be cognisant of the past, mindful of the present, and plan for the future. The last decade has been a time of great change in the perception of pain medicine in the UK, with a myriad of new players vying for contracts, and for the eye of financially stressed Clinical Commissioning Groups. The Faculty was created to provide training and professional guidance to anaesthetists running pain services. As time has passed it has become clear that this remit, while successful in itself, does not encompass all those practising pain medicine at secondary care level. I am thinking here of our colleagues in acute pain, hospital services and our non-anaesthetics colleagues (e.g. neurologists, rheumatologists etc) who have long been involved in this work, sometimes in teams including anaesthetists and sometimes in separate services. Beyond this, we have a duty in helping to frame national standards, and encouraging their implementation across the healthcare environment.

The first stream of activity has been to revitalise our links with acute pain services. Many joined in the original cohort, and their voice remains strong, but it is apparent that Fellowship through the advanced year of training and the Faculty examination is often not the route followed by many of those now entering acute pain work; with individuals often making changes in Job Plans after, sometimes long after, they have been established in anaesthetics departments. This work is well advanced under the leadership of Dr Mark Rockett, with a review of the training in both the pre- and post-Certificate of Completion of Training (CCT) or perhaps Certificate of Specialty Training (CST) environment being addressed by Dr Jon McGhie and the Training and Assessment Committee to support those taking up such positions (often as lone providers). The Board has discussed the creation of an Affiliate membership to maintain the acute pain voice within the Faculty, and the development of additional professional standards and CPD opportunities to provide further ongoing support.

For those outside of anaesthesia, there has been a continuous stream of interest, and we are looking at ways and means of formalising this. The aim of this is not to set up a rival to the British Pain Society (which has, and continues to be, the core organisation for the support of all healthcare practitioners involved in the provision of pain services – in which the Faculty remains a committed supporter), but to provide professional support for consultants in secondary care, for which we believe we can offer a natural home. This is a project in its very early stages, but we are keen to hear from individuals who would be interested, and who would like to join us in working to develop practical pathways. If you work with or are aware of such services please let us know, or ask them to contact us.

The Core Standards project has now been published, and our thanks go to its editors, Dr Beverley Collett and Dr Anna Weiss for their considerable efforts to achieve this. This work is endorsed by various professional organisations, including the Royal College of General Practitioners, with its key standards having been accepted by the Care Quality Commission. These are important documents for consideration as new service level agreements are being negotiated.

I have highlighted the larger projects here, but there are many others, and some of these may achieve greater prominence as they develop. All the achievements that we anticipate are reflections of the ideals of the former Deans – Dr Doug Justins, Professor David Rowbotham and Dr Kate Grady – and the Members of the Board who have guided the Faculty in its first decade.

So, if you’re reading this, and it’s not a ‘school night’, raise a glass to the next ten years.
Health Services Research Centre (HSRC)

The next five years: growing up, reaching out

Ramani Moonesinghe, Director, HSRC

Defining, evaluating and improving quality in anaesthesia, perioperative and pain medicine. This is the new mission statement for the Health Services Research Centre (HSRC), which has celebrated its fifth birthday in 2016 and is now under new leadership. These goals will be achieved through developing our most important resource – people – and through wide engagement with patients and the profession. A new strategy has been launched which will engage and support every anaesthetist who works in the NHS, and lead to improved quality of care for our patients. Over the next couple of pages I will describe some of the key projects that the HSRC will develop, and I hope this will engage and inspire you to join us in delivering our goals.

What is the HSRC?
The HSRC is funded and hosted by the RCoA, and is one of the ‘delivery arms’ of the National Institute for Academic Anaesthesia. It manages a number of projects which you will be familiar with and may have contributed to, such as the National Audit Projects (NAPs), the National Emergency Laparotomy Audit (NELA) and the Sprint National Anaesthesia Projects (SNAP). We also lead or contribute to a number of other academic projects, such as the international Core Outcome Measures in Perioperative and Anaesthesia Care Initiative [which will define the core outcome measures which are used in future clinical trials], and the Patient, Carer and Public Involvement and Engagement [PCPIE] Group [which provides a conduit between patient representatives and researchers, with the aim of improving the quality and patient-centeredness of research in our field]. The HSRC is managed by its Executive Board, the membership of which is currently determined by its various areas of activity; thus it includes a healthy balance of research-active and improvement-focused NHS clinicians, trainee investigators supporting major national projects, and clinical academics working within anaesthesia and perioperative care.

Strong foundations
In April 2016, Professor Mike Grocott (Southampton University) who was the founding Director of HSRC, handed over the leadership of the HSRC to me. In May, at the culmination of a highly competitive national recruitment process, Iain Moppett (Associate Professor, University of Nottingham) was appointed as the new Deputy. In June, an awayday was held to discuss and agree a new five-year strategy: http://bit.ly/1Tu7ug2, which is summarised in the infographic (opposite page). The strategy builds on the strong foundations which have been laid in the first five years, developing existing projects and embarking on several new workstreams. ‘Developing existing projects’ also means critically appraising whether they continue to be of value to patients and to our main collaborators. Thus, we will undertake formal evaluations of recurring or completed workstreams such as the NAPs, SNAPs and the James Lind Alliance Research Priority Setting Partnership, in order to ensure that we...
are using resources wisely and directing our attention to where there is likely to be the greatest gain.

Reaching out: new opportunities

A priority for us will be to expand opportunities for supporting anaesthetists in their personal development in research and quality improvement. This will have several levels. We are already playing a role in developing tomorrow’s academic leaders, through the HSRC Fellowship scheme. We now have ten HSRC fellows supporting the Perioperative Quality Improvement Programme (PQIP), NELA, SNAPs, patient-centred research methodology and our emerging work in paediatric perioperative health services research. Most are undertaking MDs or PhDs. These posts are predominantly funded by the fellows undertaking part-time clinical work at London private hospital ICUs. While this has the advantage of providing a steady source of funding for early-career researchers (without having to rely solely on the highly competitive world of obtaining independent grant funding), the fact that the posts require presence in London on one or two days per week, presents a difficult choice for trainees who have settled outside the capital’s commuter belt. It is important to note that this challenge is not insurmountable - many RCoA Council members and other contributors to RCoA and AAGBI life regularly travel from outside London to fulfil their roles, and we are very proud to have our Northern NELA boys, Mike Bassett and Tom Poulton, on board. Nevertheless, a major focus of work moving forward will be to explore opportunities to develop renewable HSRC fellowships which are either externally funded (through research grants or charitable fellowships) or part-funded through collaborations with individual hospitals or training schools across the UK. We hope that this will encourage more trainees from outside the London commuter belt to apply for our fellowships, and we will continue to work with the RCoA and NIAA to ensure that trainees from all schools are able to take advantage of opportunities that become available.

We also want to play a role in developing every anaesthetist – trainee, specialty doctor, physicians’ assistant or consultant – who wants to engage with achieving our goals. The Quality Audit and Research Co-ordinators’ (QuARCs) network provides an HSRC representative in almost every anaesthetic department in the UK. The network has been highly effective at supporting HSRC work such as SNAP-1, and we have held three well attended free-of-charge CPD days for the QuARCs to thank them for their work. Over the next few years we will work hard to further develop this network and recognise their achievements. In parallel, the development of the RCoA/HSRC Quality Faculty will aim to engage every fellow and member of the RCoA based in the UK to support major HSRC projects such as NELA and PQIP and other future quality improvement initiatives. The aspiration of the Berwick report, which is to develop a learning, improving NHS, is at the very core of our mission – developing the Quality Faculty will go a long way towards realising that ambition.

Finally, we want to reach out more broadly by means of collaborations with professional organisations, and with individuals who have relevant expertise both in the UK and beyond. We are already in discussion with a number of UK-based specialist societies regarding potential opportunities for collaboration, and will be inviting representatives from the AAGBI and the pain, critical care, paediatric and obstetric anaesthesia communities to join the Board. We are thrilled that SNAP-2 is likely to take place in Australasia as well as the UK, enabling interesting comparisons between healthcare systems and cultural
behaviours. We would like to explore the possibility of working with individuals and organisations with expertise in the challenges of health service delivery in Low and Middle Income Country settings. We also want to enhance our relationship with patients and the public, and are delighted to welcome lay representatives to the Board, in addition to those who already contribute to each of our constituent projects.

Build and grow: new projects
In addition to the broad areas addressed above, the HSRC intends to embark on several new workstreams over the next five years, and I will focus on two of these here. The first is a plan to get into ‘Big Data’. This can mean different things to different people and there are many avenues to explore, but the basic principle of using routinely collected and administrative data to explore research questions is one which we are keen to embrace. The second major workstream is the development of a Perioperative Improvement Research Laboratory (PIRL). The aim of this is to support local teams in evaluating novel services or methods of service delivery and support. Innovation is going on everywhere – examples include the development of high-risk preoperative assessment services, regional anaesthesia block rooms, and postoperative perioperative medicine rounds. However, the ability to evaluate these services for clinical and cost effectiveness, and for patient and staff satisfaction, can sometimes be challenging, particularly for departments without clear links to academic centres. Thus, the PIRL aims to build on the concept of an ‘embedded research team’ which will support local clinicians in the evaluations of their innovations so that we can get a better idea of whether or not the innovation ‘works’, and to aid the mobilisation of knowledge to other departments. We hope that PIRL will therefore be a real service to you, the clinician, who is aiming to make patient care better, and thus strengthen the relationship between the HSRC and front-line staff.

How you can get involved
If you want to dip your toe in the water, please look out for details of the Quality Faculty as it develops, and continue to engage in projects such as NELA, NAPs, SNAPs and the new Perioperative Quality Improvement Programme launching in November. If you are a consultant who wants to get more involved, please talk to your local QuARC or NELA/PQIP leads, and see what support they might need for delivering this work. If you are a trainee, please contact your local trainee research network, QuARC, NELA or PQIP lead to see what opportunities there are to get involved in these national projects. If you are interested in research opportunities as an HSRC fellow, please contact the HSRC administrator Laura Farmer, on lfarmerr@rcoa.ac.uk. We’re really looking forward to working with you over the next five years – it’s going to be fun!

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Reference
Anaesthetics: friend or foe to cancer patients?

Daqing Ma, Professor of Anaesthesia and BOC Chair, Anaesthetics, Pain Medicine and Intensive Care, Imperial College London

Cancer is the second most common cause of death worldwide, with the largest mortality attributable to solid organ tumours of breast, lung, colorectal, prostate and gynaecological origins. Despite the increasing efficacy of chemotherapy and the development of targeted pharmacological therapies over recent decades, surgical resection remains the first-line treatment option for most patients with solid tumours, as it offers the best chance of cure. It has been recognised that surgical intervention could lead to immunosuppression via the stress response, consequently increasing the risk of postoperative metastatic spread. Recent retrospective analyses showed that the risk of cancer recurrence after surgery is lower with regional anaesthesia than with general anaesthesia. This difference is thought to be due to the different mechanisms by which tumour cells respond to different anaesthetics at a molecular level although the exact pathway remains unclear.

The group has shown that inhalational anaesthetics could upregulate Hypoxia Inducible Factors (HIF)-1α and HIF-2α expressions in tumour cells. High levels of HIF have been associated with a poor prognosis in a large number of clinical studies of oesophageal, gastric, colorectal, breast, ovarian, and hepatocellular carcinomas, indicating that HIFs are heavily involved in the development and progression of many different types of cancer. These novel preliminary results indicate that anaesthetics are able to exert a strong effect on cancer cell biology. His hypothesis is that general anaesthetics can promote cancer growth and metastasis through HIF mechanisms. They aim to study the effects of exposing a variety of cancer cell lines (breast, colorectal, prostate and lung) to the anaesthetics isoflurane, sevoflurane or desflurane (inhalational), propofol (intravenous), and others at clinically relevant concentrations (doses), looking at HIF downstream gene and protein expression as well as cell proliferation, migration, invasion and chemotherapy resistance with the established methods in his laboratory.

The group proposes to investigate the effects of exposing a variety of cancer cells (breast, colorectal, prostate and lung) to routine anaesthetics, in order to obtain a definitive answer at pre-clinical level to the question of whether commonly used anaesthetics can increase risk of metastasis for cancer patients. These data will support further clinical trials, and ultimately change medical practice to benefit cancer patients. This project is likely to yield evidence that may ultimately be used to guide clinical practice, in the design of the most suitable anaesthetic strategy for cancer patients undergoing surgery. Given the wide choice of anaesthetic agents and techniques currently available, it is conceivable that such a change to anaesthetic practice would be feasible and inexpensive to implement.
SPACE – a new frontier to explore postoperative morbidity

Gareth Ackland, Senior Lecturer, Perioperative Medicine, Barts and The London School of Medicine and Dentistry, Queen Mary University of London

My BOC award centres on refining the perioperative management of cardiovascular medication, building on the translational clinical trial format I have developed in previous studies.1–4 Discontinuing many (chronically prescribed) cardiovascular medications during acute hospital admission confers worse outcomes.5,6 Conversely, commencing therapies preoperatively that are unequivocally beneficial in the general medical population, such as statins,7,8 and sympatholysis,9,10 have failed to improve perioperative outcomes. Two clear messages have emerged from these findings: first, cardiovascular drugs largely exert their benefit over the long-term; second, using drugs in the perioperative setting on the assumption that they exert benefit for precisely the same reasons as in the general population appears to be mechanistically flawed. This is particularly relevant for perioperative myocardial injury (PMI), a sentinel perioperative event.11 Preoperative CT-angiographic appearance does not correlate with development of PMI,12 while established, evidence-based cardiology therapies (beta-blockade, aspirin),9,13 for myocardial ischaemia fail to reduce the incidence of PMI. These findings suggest strongly that the fundamental mechanisms underlying PMI, and the associated protracted postoperative recovery, are quite unclear. This really is a clarion call for perioperative medicine, reinforcing that we routinely face a clinical challenge with its own, very specific, evolution of pathogenesis that remains poorly understood.

At least 40% of surgical patients most at risk of postoperative complications, including PMI, are prescribed angiotensin-converting enzyme inhibitors (ACE-I) or angiotensin-II receptor blockers (ARB).1,14 ACE-I/ARBs are first-line therapy for improving outcomes from several chronic diseases, including hypertension, chronic kidney disease and cardiac failure. Beneficial pleiotropic effects of ACE-I/ARBs include cardiovascular and autonomic remodelling,15 in addition to reducing inflammation.16 The use of ACE-I/ARBs is set to rise dramatically, since the landmark SPRINT trial demonstrated that lowering blood pressure control targets to systolic ≤120mmHg reduces mortality.17 Thus, ever-increasing numbers of surgical patients will be...
prescribed ACE-I/ARBs, particularly those with cardiometabolic and chronic kidney disease who are most at risk of perioperative morbidity.

We know from routine experience that ACE-I/ARBs are frequently stopped before surgery in the widely-held belief that this prevents intraoperative hypotension – although robust evidence for this is lacking. UK practice and international guidelines appear to vary widely, reflecting significant clinical uncertainty regarding how to manage ACE-I/ARB perioperatively. More worryingly, two large ‘Big-Data’ studies found a striking association between stopping and failing to restart ACE-I/ARB and a substantially increased risk of perioperative mortality.

Acute withdrawal of ACE-I/ARB could be directly injurious in patients on chronic ACE-I/ARB therapy, through the combination of high circulating levels of angiotensin-II peripherally, and chronic treatment resulting in upregulation of the angiotensin-II type 1 receptor (AT1R). The angiotensin-II/AT1R axis is directly mechanistically linked to key pathological mechanisms fuelling postoperative morbidity, namely immunosuppression, and myocardial and autonomic dysfunction. To address this question, I will undertake the SPACE [Stopping Perioperative ACE-inhibitors/Angiotensin-receptor blockers] trial, a mechanical, randomised controlled trial designed to establish whether patients receiving chronic ACE-I/ARB therapy should stop, or continue, these medications perioperatively. The primary outcome will be myocardial injury (measured by high-sensitivity troponin), and this will be blinded to clinicians and patients. Samples from trial patients will enable mechanistic studies that examine how ACE-I/ARB withdrawal impacts on autonomic and immune function, key targets through which ACE-I/ARB limit progression of cardiometabolic disease and, potentially, postoperative morbidity.

References
In 2013 the National Institute of Academic Anaesthesia (NIAA) launched an initiative to help undergraduate medical students by providing financial support for intercalated BSc projects. The funding goes directly to the students and the scheme is designed to encourage student interest in anaesthetics and its related disciplines.

In the first year, awards were offered by the AAGBI/Anaesthesia and the BJA/RCoA. Since then some of the specialist societies have offered bursaries through the scheme and we look forward to more NIAA funding partners joining in time. We recognise that many universities now offer Masters degrees instead of iBSc degrees, and we are currently reviewing the application rubric and form to see how best to reflect this trend.

Since the scheme began in 2013 we have awarded 31 grants to a total of £61,000 and we are delighted to share some examples of successful projects with you below.

To find out more about all of the projects supported to date, please go to: http://bit.ly/2cPD5ln.

Genetic factors implicated in variability in response to tramadol in patients with osteoporosis
Huang R, Alfirevic A
(BJA/RCoA 2015)
Tramadol is a frequently prescribed analgesic. However, many patients experience inefficacy or toxicity. Caucasian osteoporotic fracture patients prescribed tramadol for pain management were recruited to explore the relationship between CYP2D6 copy number variants and OPRM1 c.118A>G genotype, on both efficacy [N=89] and toxicity [N=55] of tramadol. Associations were demonstrated between reduced toxicity, efficacy and OPRM1 c.118A>G polymorphisms; however none were found with increased CYP2D6 gene expression. Analgesic response is complex and influenced by many factors. This study was limited by the small sample sizes used, however further research could contribute towards a better understanding of tramadol response and improved prescribing.

Global incidence and associations of acute kidney injury after elective surgery in the International Surgical Outcomes Study
MacDonald N, Chaudery H, Prowle J, Pearse RM
(BJA/RCoA 2016)
Acute Kidney Injury (AKI) as a postoperative complication is associated with a significant increase in morbidity and mortality, even when classified as mild (KDIGO stage 1). The International Surgical Outcomes Study (ISOS) was a prospective seven-day cohort study that investigated postoperative complications and outcomes in 44,814 adult patients undergoing elective inpatient surgery across 27 countries. We aim to use this data to quantify the associations between perioperative AKI and mortality in the 30 days after surgery in the ISOS cohort, incorporating adjustment for potential confounders including demographics, comorbid conditions (in particular pre-existing chronic kidney disease), and procedure-related variables in a multi-variable survival model.

EEG analysis of patients receiving dexmedetomidine
Hunter A
(BJA/RCoA 2015)
Delirium is widely prevalent in an intensive care unit (ICU) setting, and is associated with numerous negative clinical outcomes. The objective of my project was to characterise the EEG patterns associated with delirium, specifically in an ICU patient population. Recording and identifying EEG patterns associated with delirium provides insight into the state of the brain during a delirious episode, thus providing further information about the pathophysiology of the condition. For the purpose of this study, EEG patterns were recorded and analysed from 11 ICU patients. Results obtained during this project suggested that delirium was associated with a reduction in beta and gamma brain waves, two brain waves that are linked with information processing and executive function.
Chronic pain and sleep
Vaughan R
(BJA/RCoA 2016)
Sleep disturbance has a high prevalence in patients with chronic pain, and has been shown to worsen symptoms by increasing the frequency and lowering pain thresholds. The Brief Pain Inventory (BPI) is a well-validated questionnaire which is commonly used to assess pain and its interference with life, including sleep quality and quantity. The Pittsburgh Sleep Quality Index (PSQI) and Verran and Snyder-Halpern (VSH) scale are more comprehensive in the assessment of sleep, but are not routinely used in pain clinics. The study aims to evaluate the effectiveness of the BPI method in assessing sleep quality in patients, by comparing it to the PSQI and VSH scale.

A study to assess the clinical and socio-economic effects of an electronic preoperative assessment tool: ePAQ-PO
Taylor S, Andrzejowski J, Radley S, Wiles M
(AAGBI/Anaesthesia 2016)
The electronic Personal Assessment Questionnaire – Preoperative (ePAQ-PO) is a computerised, web-based system that is self-completed by patients. It enables streamlining of the current clinic-based system for anaesthetic preoperative assessment.

The aims of the project are as follows:
1. To compare costs to the NHS of two ePAQ-PO pathways compared to the routine preoperative assessment (POA) pathway.
2. To compare the personal and societal costs of the ePAQ-PO pathway compared to the routine POA.

A final facet of our study will garner patient experiences and opinions of the ePAQ-PO pathway. It is anticipated that patient questionnaires together with staff assessments will contribute to achieving these goals.

A study to demonstrate whether strained ICU capacity affects patient outcomes in ICUs in a UK setting
Blayney M
(AAGBI/Anaesthesia 2016)
Intensive care units (ICUs) are subject to fluctuating levels of activity. Quality of care may be compromised at times of peak activity, potentially affecting patient outcomes. A framework for peak activity, ‘ICU capacity strain’, and how to measure it has been the subject of previous research. This framework has not been applied to a UK setting however, where ICU beds are fewer and have higher occupancy rates. This study hopes to utilise the Scottish audit of critical care, as well as other linked datasets, in order to assess the effect of ICU capacity strain on outcomes for patients across all Scottish adult, general ICUs.

A study to see whether it is possible to identify a unique pattern of brain activity (detected by EEG) for pain caused by osteoarthritis or rheumatoid arthritis
Sandhu J
(BJA/RCoA 2015)
In order to identify a specific target for neurofeedback, this study investigated alpha-wave changes in 30 healthy volunteers during musculoskeletal joint pain in comparison to an unpleasant sound stimulus. Significant increases in frontal alpha were found in the pain condition in comparison with an unpleasant sound condition (p=0.040). When comparing the pain condition to the no-pain condition, this increase fell just below the level of significance (p=0.051).

This study was able to identify an increase in frontal alpha which may act as a potential target for future neurofeedback interventions. This may improve the efficiency and cost of these interventions.

Melatonin as a novel therapy in sepsis: effect on biomarkers
Shumeyko M
(BJA/RCoA 2015)
Sepsis is a systemic inflammatory response to infection that is mediated in large part by mitochondrial dysfunction and oxidative stress. Melatonin and its major metabolic derivative, 6-hydroxymelatonin, are powerful antioxidants, and have been shown to ameliorate sepsis-induced oxidative stress. This in vitro study aimed to investigate the effects of melatonin and 6-hydroxymelatonin on the production of select pro- and anti-inflammatory cytokines by endothelial cells and macrophages under conditions mimicking sepsis. Preliminary results suggest both drugs have a similar and mostly suppressive effect on the production of both pro- and anti-inflammatory cytokines in macrophages but little to no effect in endothelial cells.

The effect of acupuncture on preoperative anxiety in neurosurgical patients: a randomised controlled trial
Mamdani J
(Neuro Anaesthesia and Critical Care Society of Great Britain and Ireland 2015)
Preoperative anxiety affects around 90% of neurosurgical patients and is associated with intraoperative and postoperative complications. Acupuncture is a low-cost and well-tolerated intervention with previous studies demonstrating its preoperative anxiolytic effects.

The aim of this study was to investigate acupuncture’s anxiolytic effects in neurosurgical patients. On the day of surgery, participants were randomised to receive 30 minutes of acupuncture at the Yintang point or a non-treatment control. Anxiety levels were measured at baseline and following intervention or control using the State-Trait Anxiety Inventory (STAI-S) and the Amsterdam Preoperative Anxiety and Information Scale (APAIS).
A total of 124 participants were recruited and analysed. Acupuncture significantly decreased STAI-S6 scores and APAIS scores from baseline by 16% and 23% respectively (p<0.001). No change was observed in the control group (p>0.05). To our knowledge, this is the first study investigating acupuncture’s effect on preoperative anxiety in neurosurgical patients.

Preoperative frailty scores as markers for assessing healthy survival after major cardiac surgery in patients
De Carvalho JL
(AAGBI/Anaesthesia 2016)
Cardiac surgical populations are increasingly ageing. It is becoming more important to accurately stratify perioperative risk in these patients. It remains uncertain whether frailty scores provide added benefit in predicting postoperative morbidity and disability in cardiac patients.

We investigated whether a preoperative frailty score (Comprehensive Assessment of Frailty, CAF) had the potential to predict postoperative ‘disability-free survival’ in an adult cardiac surgical cohort, using the World Health Organisation Disability Assessment Schedule (WHODAS-2.0).

In 68 patients, followed prospectively, frailty was associated with reduced postoperative disability-free survival (p<0.05), as well as increased in-hospital mortality and multi-organ complications (p<0.05) at one month post-op. Frailty may provide potential as an added variable in cardiac surgical risk stratification.

Rotational thromboelastometry profiles in patients undergoing liver transplant
Campbell R
(BJA/RCoA 2016)
Haemostatic abnormalities seen in patients undergoing liver transplantation are complex, and may be related to the underlying liver-failure aetiology. Patterns of abnormalities, assessed using rotational thromboelastometry, may be associated with, and predictive of, either haemorrhagic or thrombotic perioperative complications.

Our study will involve analysis of prospectively collected perioperative data from patients undergoing liver transplantation in the Scottish Liver Transplant Unit between 2010 and 2016. The thromboelastometry values will be characterised with relationship to underlying aetiology. Additionally, associations between perioperative thromboelastometry abnormalities and haemorrhagic or thrombotic complications will be investigated.

We hope that increasing understanding of these abnormalities will improve future patient management.

The association between postoperative analgesic technique and long-term patient outcomes following surgical resection of lung cancer: a retrospective analysis
Moran D, Shelley B
(AAGBI/Anaesthesia 2015)
Opioids play a key role in postoperative pain management; however they may promote the persistence of residual tumour cells following resection. This project investigated whether opioid-sparing regional techniques are associated with improved postoperative outcomes. In a retrospective cohort of 626 surgical lung cancer patients, the survival outcomes of those receiving an epidural block alone were compared to those receiving a paravertebral block with additional systemic opiates. Kaplan-Meier analysis found no difference in either cancer-related or all-cause mortality. Multivariate Cox regression also indicated that analgesic technique did not significantly predict survival. This suggests that the benefits of regional analgesia may outweigh the potential negative effects of additional opiates.

Study to further investigate the mechanisms of leukocytes activation during VILI and how this activation leads to systemic inflammation
Du W
(BJA/RCoA 2016)
Mechanical ventilation initiates and propagates extra-pulmonary inflammation. This mice-based in-vivo study investigated the hypothesis that high-stretch mechanical ventilation would activate lung-marginated monocytes [LMMs], which may then be important in orchestrating the extra-pulmonary inflammation. We further hypothesised that stretched lung endothelial cells release ATP to activate the LMMs.

By using a flow cytometer to measure cell-based phosphorylation states of MAPKs and NFκB, we found that 15 minutes of high-stretch ventilation activated LMMs and also dendritic cells, but only in the presence of subclinical doses of LPS. Addition of ATP inhibitor did not abrogate the activation of the LMMs or any other cell type studied.

Please see the NIAA’s position statement (http://bit.ly/2ca0A97) on the use of animals in medical research.

An exploration of the relationship between patterns of sedation during intensive care, early patient recollection of the ICU experience, and early trauma symptomatology among survivors of critical illness
Train S
(BJA/RCoA 2016)
Most mechanically ventilated critically-ill patients require sedation. Avoiding deep
sedation can decrease adverse outcomes, including longer intensive care (ICU) stay and infections. However, lighter sedation may result in the later recall of agitation and frightening experiences. I will analyse an established database for patterns of deep sedation and agitation in ICU patients \( n=479 \), the experiences patients recall after discharge, and whether these are linked. A prospective study will examine why deep sedation occurs by conducting a survey of ICU clinical staff. The project will provide new data concerning the relationship between sedation practice and patient experience, as well as exploring the reasons deep sedation is used.

The effect of cardiac surgery with cardiopulmonary bypass on platelet microvesicles


Platelet microvesicles (PMV) are sub-micron, membrane-derived vesicles, released from activated platelets. It has been suggested that PMV numbers and their protein expression are significantly altered during cardiac surgery with cardiopulmonary bypass (CPB). Our study aimed to characterise these changes, and also assess whether arterial and venous samples can be used interchangeably in the study of PMV counts. We found that CPB selectively increases the number of PMVs expressing certain cell-surface proteins, and that despite some observed differences, there was sufficient evidence to suggest that arterial and venous samples can be used interchangeably in future studies of PMV number.

National Institute of Academic Anaesthesia (NIAA)

Research Grants

Results of 2016 Round 1

On Tuesday, 28 June 2016 the NIAA Grants Committee met to consider the first round of applications for 2016 on behalf of the Association of Anaesthetists of Great Britain and Ireland (AAGBI) and Anaesthesia, the British Journal of Anaesthesia (BJA) and the Royal College of Anaesthetists (RCoA), the British Society of Orthopaedic Anaesthesia (BSOA), the Difficult Airway Society (DAS), the Neuroanaesthesia and Critical Care Society of Great Britain and Ireland (NACCSGBI), the Obstetric Anaesthetists’ Association (OAA), Regional Anaesthesia UK (RA UK), and the Vascular Anaesthetic Society of Great Britain and Ireland (VASGBI).

The committee considered 42 applications over seven categories for a requested sum of £1,650,917 and made a total of 18 awards over six categories to a value of £644,685. Success rate: 43%.

A list of the successful applicants can be found in the following table and abstracts can be viewed at: http://bit.ly/2cPDHrg.

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<th>AAGBI/Ancasthesia Research Grants</th>
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<tr>
<td>Dr Daniel Martin, Royal Free Hospital, London</td>
<td>Intraoperative Hypotension in the Elderly: Observational Study of Intraoperative Hypotension in Elder Patients in UK Hospitals (iHypE)</td>
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<td>Professor Jonathan Hardman, University of Nottingham</td>
<td>The impact of blood pressure thresholds on perioperative mortality in non-cardiac surgery in a United Kingdom database</td>
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<td>Dr Niraj Gopinath, Leicester General Hospital</td>
<td>The incidence of chronic headache and low back pain after accidental dural puncture with a Tuohy needle and epidural blood patch in the obstetric population: a prospective 2-group cohort study</td>
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<td>Dr James Jack, Royal Sussex County Hospital</td>
<td>Pressure Area Distribution on a Variety of Clinical Surfaces in a Group of Volunteers</td>
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<th>BJA/RCoA Project Grants</th>
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<td>Dr Sarah JL Flatters, King’s College, London</td>
<td>Investigation into blood biomarkers for chemotherapy-induced peripheral neuropathy</td>
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<td>Dr Simon Finney, St Bartholomew’s Hospital, London</td>
<td>The prognostic value of pupillometry in patients with return of spontaneous circulation after out-of-hospital cardiac arrest</td>
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<td>Name of Investigator</td>
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<td>Dr Daniel Martin</td>
<td>Royal Free Hospital, London</td>
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<td>Dr Michael Gillies</td>
<td>Royal Infirmary of Edinburgh</td>
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<td>Dr Simon Howell</td>
<td>St James’s University Hospital, Leeds</td>
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<td>Dr Jonathan Bilmen</td>
<td>St James’s University Hospital, Leeds</td>
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<td>Professor Dave Lambert</td>
<td>Leicester Royal Infirmary</td>
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<td>Dr Simon Beggs</td>
<td>UCL Institute of Child Health, London</td>
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<td>Professor Helen Galley</td>
<td>University of Aberdeen</td>
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<td><strong>BSOA Project Grant</strong></td>
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<tr>
<td>Dr Narendra Siddaiah</td>
<td>Royal Orthopaedic Hospital NHS Foundation Trust, Birmingham</td>
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<td><strong>DAS Project Grant</strong></td>
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<td>Dr Chia Kuan Yeow</td>
<td>Royal Surrey County Hospital</td>
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<tr>
<td>Dr Peter Groom</td>
<td>Aintree University Hospitals NHS Foundation Trust, Liverpool</td>
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<tr>
<td><strong>OAA Large Project Grant</strong></td>
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<td>Dr Peter Odor</td>
<td>St George’s University Hospital, London</td>
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<td><strong>RA-UK Project Grant</strong></td>
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<td>Dr Loukia Tsaprouni</td>
<td>University of Bedfordshire</td>
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In 1952, the Faculty of Anaesthetists was established at the Royal Australasian College of Surgeons (RACS) with 69 Foundation Fellows. It came to represent the specialty in training, education and standards in both Australia and New Zealand, growing in size and autonomy.

The formation of an independent College took years of careful planning, and was finally achieved with the creation of the Australian and New Zealand College of Anaesthetists (ANZCA) in 1992.

Separating from a parent body is not simple for either organisation, something ANZCA discovered 20 years later when its own Joint Faculty of Intensive Care made the same decision. However, such growth and development is important – it could be argued that an important function of specialty medical organisations is to foster the development of sub-specialty areas into independent bodies.

ANZCA has now grown to a fellowship of more than 6,400 specialist anaesthetists and more than 1,500 trainees. It currently supports another faculty, the Faculty of Pain Medicine, which has 400 Fellows and 80 trainees.

An important initial step for ANZCA was the development of a clear, simple ‘mission’ or purpose, one which has expanded in scope and changed slightly over time: ‘to serve the community by fostering safety and high-quality patient care in anaesthesia, perioperative medicine and pain medicine’.

Physical relocation from the RACS building in Melbourne was also required, and our current premises on the nearby prestigious St Kilda Road ‘boulevard’ were purchased in 1993.

Initially the original stately home, Ulmaroa, met our needs, but by the late-1990s it was clear that more modern, spacious facilities were needed. The seven-storey ANZCA House building, constructed at the rear of Ulmaroa, opened in 2001. This building contains the corporate offices, with the original 1880s Italianate building now functioning as an area for the Fellows and trainees; it houses important resources such as the library, the museum and the associated staff.

These facilities are most important, with the library providing 24-hour access to thousands of resources for trainees and Fellows. ANZCA now has offices or secretariats in the capital cities of all seven of Australia’s training regions and in Wellington, New Zealand.

Training, an important role for the College, continues to evolve. Over the last 25 years, training has been extended from four to five years, part-time training has allowed for a
variety of family circumstances and, more recently, the curriculum has been completely overhauled.

Technology has advanced in all areas of teaching, with most academic resources now available online and simulation courses, such as Effective Management of Anaesthetic Crises (EMAC), part of the training program.

The College has also developed a comprehensive continuing professional development (CPD) program, revised in 2014, which is a requirement of practice for all Fellows. This three-year program requires engagement in a number of activities. It is regularly audited; and is supported by courses held by the College in-house and at its annual scientific meeting (ASM), which can attract more than 2000 attendees. Hands-on participation in workshops has been a major shift in focus of the ASM over the life of the College. While lectures still retain a place at these meetings, trainees and Fellows now expect more interactive education in order to hone and maintain their practical skills.

Possibly as a mark of its independence, the new College rapidly sprouted a number of special interest groups (SIGs). There are now 17 SIGs, which share members across ANZCA, the Australian Society of Anaesthetists and the New Zealand Society of Anaesthetists, including the important Welfare of Anaesthetists SIG. Founded in 1997, this SIG demonstrates the College’s commitment to its Fellows beyond the academic and medical sphere.

The Faculty of Intensive Care was created in 1993, almost immediately after the formation of the College. In 2002 it became a Joint Faculty with the Royal Australasian College of Physicians (RACP), a step along the way to becoming an independent College of Intensive Care Medicine in 2010.

Collaborative faculties are not unusual but none are as complex as the Faculty of Pain Medicine, formed in 1999 with Professor Michael Cousins as the first Dean. This was the first such faculty in the world. Pain medicine is now recognised as a multidisciplinary specialty, and the Faculty embodies that spirit – a collaboration between ANZCA, RACS, RACP, the Royal Australian and New Zealand College of Psychiatrists (RANZCP) and the Australasian Faculty of Rehabilitation Medicine (AFRM) of the RACP. A fellowship in pain medicine can be obtained by specialists from any of these bodies.

The next 25 years
The prospects for the specialty of anaesthesia and for our College over the next 25 years are as exciting, challenging and possibly as unforeseeable as they were in 1992.

The specialty of pain medicine will continue to grow and develop. The close ties between anaesthesia and pain medicine will always and necessarily be present, but it is probable that the Faculty will eventually form its own independent College when it is deemed to be in the best interests of its Fellows to do so.

Techniques and technologies of education and training are evolving rapidly, and the way the College trains and supports its trainees will necessarily follow – if not lead. These changes will make it easier to train in anaesthesia and support Fellows in regional and remote areas, which is an increasing need whether a country is as large as Australia or smaller, as is New Zealand. The cultural and ethnic diversity of our specialists will continue to grow to reflect the community and its needs.

Over the next 25 years, curriculum development will become increasingly resource-intensive. A burning question is the sustainability of the specialist college model of education and training, which relies on a large volunteer workforce of committed Fellows supported by progressive curriculum development. Universities, on the other hand, increasingly work on a business model which would struggle to provide the personal training that highly skilled practitioners require. The College may form collaborations with universities in some areas of knowledge-intensive practice, such as perioperative medicine, but the best outcomes will be supported by College-led training.
The College has a role in workforce planning and will continue to consult and advise the government on matters relating to training numbers and practice patterns.

ANZCA does not ‘limit’ trainee numbers except by virtue of the need for a sufficient volume of practice in various specialised areas, e.g. paediatrics, thoracic and obstetrics. Current projections suggest that specialist anaesthetist numbers in the workforce will be still in balance in Australia by 2030, although there is now an imbalance between urban and rural/regional practitioner ratios. It is difficult, however, to predict how changing expectations, working hours, retirement planning and gender balance will affect these numbers. It is likely that training time will extend because of a desire to consolidate practice skills before entering the specialist workforce. This may take the form of a second ‘fellowship’ year, or even a third, becoming the norm.

The changing practice in anaesthesia care and patient needs is being reflected in the growth of perioperative medicine. All ANZCA trainees are expected to be highly competent in this area. For Fellows wishing to strengthen their expertise even further this will first likely develop as a sub-specialty but within the next two decades, possibly as a specialty in its own right. ANZCA is currently evaluating models to best serve this expanding area. Specialist anaesthetists will become diagnosticians in a number of sub-speciality areas beyond the current emphasis on cardiac ultrasound. The College will need to develop programs and collaborations to support these increasingly cross-speciality areas.

Community expectations that specialist anaesthetists are current in knowledge, competent in skills, and providing safe care is a challenge that is only partly met by our CPD program in its current form. Regulatory requirements will soon demand some form of revalidation process, and the College, having already taken steps through its recently revised CPD program, is determined to participate further in developing this for the benefit of both the community and our Fellows.

The pure application of economic drivers in healthcare will increasingly push healthcare organisations and governments to consider alternative, non-specialist, models of anaesthesia and pain medicine provision.

ANZCA is committed to the provision of anaesthesia by specialist anaesthetists wherever possible, and by medical practitioners in every case. This will require ongoing advocacy and the maintenance of the highest standards of clinical practice, audit and review to ensure the best and most efficient outcomes. In special circumstances, it will likely be the case that supervised sedation by appropriately trained clinicians will become the norm. However, the only way this can be achieved safely is if standards of care and supervision are maintained. These are sensitive issues but must be engaged constructively if patient outcomes are to be preserved.

Research differentiates professionals from clinical service providers. ANZCA already has a world-leading Clinical Trials Network and a well-established research grants program. Collaborative international multicentre research programs will continue to develop, as will alliances with other countries’ research networks.

Relevant answers to research questions targeting improved clinical outcomes will best be achieved by alliances with partner colleges and societies around the world. Health economics will be a key driver. Funding for research will likely be more difficult to achieve. Partnerships with industry, even for unrestricted grants, will become less common because of concerns regarding the perception of influence and conflict of interest. Our own Anaesthesia and Pain Medicine Foundation will continue its drive to grow and thus autonomously support our research grant program, currently providing over $A1.4 million per year.

Research directions are incredibly difficult to forecast because they are dependent on technology and pharmacology, both in anaesthesia and medicine in general. In the near-term, an increased focus on the central nervous system, including fast and full recovery, and acute pain management will be likely.

The world community of specialist anaesthetists will increasingly want the opportunity to move and practise effectively across national jurisdictions, especially for short-term training and development. It would be hoped that specialty training curricula can become increasingly ‘substantially comparable’ with even a few countries’ programs becoming ‘fully comparable’. This will enable sharing of resources and an improved global standard of care. While most countries will continue to manage their workforce very carefully, the opportunities for short-term professional ‘exchange’ should be encouraged.

Finally, our social obligation to help our international neighbours will continue to grow. It is hoped that programmes to provide overseas aid and resources, in particular with education and training, will continue to expand. A collaborative approach with our sister professional organisations will result in the most effective and efficient outcomes.

We thank the Royal College of Anaesthetists for the opportunity to contribute to their 25th anniversary edition, and look forward to increased collaboration in many areas in the years to come.

For more information about ANZCA, see www.anzca.edu.au.
Jean-Pierre van Besouw was the President of the College from 2012–2015. Days before he stepped down as President, he became ill and underwent urgent surgery for a brain tumour. A year later, he is defying prognostic statistics and slowly improving from the combined adverse effects of surgery, chemotherapy and radiotherapy. We met in the drawing room of his elegant house in Kingston – well – perhaps Surbiton – okay, let’s agree on ‘Kingston Borders’ – after all, it is in the Royal Borough of Kingston upon Thames (but so is Surbiton) Enough geographical debate – let’s get on with the interview.

I asked him to tell me what he could recall as the clinical episode that gave him the most satisfaction in his 33 years as an anaesthetist. To my surprise, he cited the last anaesthetic that he had ever given, although he had not been aware that it was to be his last at the time – the symptoms that revealed his tumour declared themselves the day after.

‘The patient was a 79-year-old with severe back pain from a huge aneurysm of the ascending aorta. She had multiple co-morbidities and had been turned down by two other cardiothoracic centres. The surgeon and I reviewed her and, although I suppose that we should have turned her down as well, something about her made us want to offer her a chance of survival. It certainly wasn’t hubris – the surgeon and I had worked as a team for years and we had seen our share of poor outcomes – we were realistic. It was in part her make-up – really! A 79-year-old woman in constant, severe pain with a lethal diagnosis took the time and effort to carefully apply her make-up – this was the sort of person who was going to survive. The operation took four hours and was far from easy, but it went well.’

When JP saw the patient the next morning, she was sitting up in bed, eating her breakfast. That evening, he became acutely ataxic, and was admitted to his own hospital for tests. Five days after her operation, JP’s patient went home. It was the same day that he went in for his surgery. The irony of the situation was not lost on JP or any of his friends, but the memory of the success of her operation helped sustain him through the dark weeks after his own surgery and uncertain prognosis.

We then moved on to what he felt was the most significant development that had been achieved during his time as President. Without hesitation, he told me that it was the creation of GPAS – the College’s Guidelines for the Provision of Anaesthetic Services.

‘Thanks to Peter Venn and Charlie McLaughlan, we were able to get recognition that there had to be uniform standards in the delivery of anaesthesia across the UK. Working with a large team of staff and clinicians, the College created standards for all forms of clinical anaesthetic practice, and then set up a system by which departments of anaesthesia could be assessed against these standards and, if appropriate, certified – the Anaesthesia Clinical Services Accreditation (ACSA) process. I am delighted that these standards are starting to get official National Institute for Health and Care Excellence (NICE) recognition, and that I have seen this develop from concept to fruition. I am convinced that it will result in higher standards for patients throughout the UK, and I am proud to have played a part in the creation of GPAS and ACSA.’

We then turned to the College and what he would like to change about it.

‘Colleges were originally like gentlemen’s clubs: chintz curtains and chesterfield sofas, with deep-pile, burgundy carpets leading to mahogany-panelled offices. The generations of young doctors coming through now do not connect with these trappings and do not necessarily want them – they are anachronisms that older generations might wish to cling to, but, as they do so, they must realise that they are perpetuating an outdated view of the ethos of the College. At the College Diplomates Day, we have all the pomp and circumstance: the medals, the gowns and the mace. Do the candidates want this? Do their parents want this? Or is it us and our own sense of importance and history? We are a progressive College that should be looking forwards rather than backwards, and the regalia and paraphernalia that we wear and use are at odds with this. Their place is in a glass case in the College – for all to see but none to wear or wield. Our organisation is modern and forward thinking, and the way we do things should be consistent with this.’

I pressed him on his portrait that hangs on the wall of the Council Chamber along with those of other former Presidents and
Deans, thinking that he might make an exception for this trapping, this palpable epitome of his personal legacy.

“The oil paintings of the great and good hark back to the gentlemen’s club era, and ape the traditions of the old colleges such as the physicians and surgeons – I see no real point in them. You and I might recognise all those arrayed along the wall of the Council Chamber, but if you took someone who had just passed their FRCA and asked them to name those immortalised in gilded frames, they would not probably get any further than my portrait – if I was lucky. I think that professionally produced, high-quality photographs would be much better – and considerably cheaper.”

We then talked about what anaesthesia would look like in 25 years’ time, and I asked him who he thought would be giving the anaesthetics in 2042.

“The population is changing, and more and more of our patients are going to be elderly people with multiple co-morbidities. This is going to create a real challenge for the medical profession as a whole and anaesthetists in particular. I don’t think it is important who actually delivers each element of an overall package of care, but I think it important that anaesthetists are in charge of the perioperative process – from preoperative assessment, through surgery and to recovery. The hard economic reality is likely to be that the state cannot afford to pay high salaries to those who give fit patients straightforward anaesthetics for short procedures if this sort of care can safely be delivered in a different way. I have long thought this, but never liked to say it. I was a cardiac anaesthetist in a highly specialised unit, providing complex care to the sickest of patients – like the woman I described before, and yet I got paid the same as the person who did a list of six hysteroscopies on healthy women, albeit that the latter list was more productive for the trust. Can we continue to afford this model of care and remuneration? I don’t think so.’ New models of care are likely to focus on outcomes and productivity, and possibly terms and conditions reflecting the value of an individual to an organisation.

I then turned to why he went into anaesthesia rather than other specialties, recalling that I had no real idea of what the life of a consultant anaesthetist – or indeed a consultant from any specialty – was going to be like when I had completed my training.

‘I knew I didn’t want to be a surgeon. I could not understand their mentality, and I did not like the way they treated their trainees in those days. I liked doing procedures and I liked pharmacology, but what most attracted me when I was a student and houseman was the fact that the consultant anaesthetists would sit down and actually talk to you like a real person – they were the only ones who really engaged with you. I can clearly remember them to this day: people like Brian Gillett, Bob Ballantine and Tom Boulton. That was what brought me to anaesthesia, coupled with the fact that there were no outpatient clinics or endless ward rounds!’

I finished by asking him what he thought was the biggest challenge for medicine in the next 25 years.

‘To me, it’s all about improving outcome, but not outcome as we currently view it. Success is not simply patient survival. Yes, we are steadily improving survival rates after cancer and other life-threatening diseases, but crude numerical survival should not be our goal in the future. It should be more about survival with a lifestyle similar to that experienced before the diagnosis. Look at me. I am a neurosurgical success story. I am in remission after treatment of an aggressive tumour, and under current ways of assessing outcome, my treatment was very successful, and yet I cannot get out of this wheelchair without help. I am not resentful at all. I am happy to still be alive and in full charge of my mental, if not physical, faculties, but I want outcome to be judged in a different way for patients in the future.’

I have always respected and admired JP van Besouw, but as I left him sitting by the window of his ‘Kingston Borders’ house after the interview, I left with even more respect and admiration for him. He is facing the greatest challenge of his life with the same intelligence, pragmatism and determination with which he has faced all the challenges with which a career in anaesthesia and the leadership of our specialty have presented him. He is still using his wisdom and experience to benefit his colleagues and patients with his advice and views, albeit given via ‘phone, text, WhatsApp and email, rather than face-to-face as he was once able to.

I know he wouldn’t agree, but I think he is worth an oil painting.
To begin at the beginning…

Paul Clyburn, President, Association of Anaesthetists of Great Britain and Ireland (AAGBI)

The Association of Anaesthetists of Great Britain and Ireland (AAGBI) was founded in 1932 by Henry Featherstone, who at the time was President of the Anaesthesia Section of the Royal Society of Medicine. Its foundation was the natural response to the rapidly growing and evolving specialty of anaesthesia following the First World War, and it was a response to the need to establish the importance of anaesthesia as a specialty with the increasing sophistication of surgery. Part of this development came in 1935 under the drive of Sir Ivan Magill - the establishment of a postgraduate Diploma in Anaesthesia, the DA.

During the negotiations leading to the birth of the NHS in 1948, the AAGBI helped to ensure that anaesthetic practitioners were awarded consultant status equal to that of consultants in other specialties. Part of achieving this milestone was to further enhance postgraduate training by establishing a Faculty of Anaesthesia of the Royal College of Surgeons of England (RCS) which could oversee a two-part Diploma examination, to include scientific principles, and modelled on and of similar status to the FRCS. Thus was born the Faculty of Anaesthesia, and its first Dean, Archibald Marston, was the Immediate Past-President of the AAGBI, with a Council composed mainly of AAGBI Board members. Since then, there have been a further six Deans of Faculty or Presidents of College who have also served as President of the AAGBI, with a Council composed of AAGBI Board members. These facts illustrate the closeness of the two organisations.

The Faculty has continued to develop and grow: in 1988, it began its separation from the RCS by achieving College status (remaining a College within a College) and, four years later, on 16 March 1992, it achieved constitutional separation and was awarded a Royal Charter to become the Royal College of Anaesthetists.

Going back to the birth of the then Faculty, the AAGBI can lay claim to be its parent. As with all parent–offspring relationships, there are several stages. Initially the baby is totally dependent and requires close care and nurturing if it is to grow, and our predecessors managed these requirements extremely well and allowed the Faculty to develop, from taking early steps to running with the pack of other specialty Colleges and Faculties.

However, just as with all parent–child relationships, there come the ‘teenage years’, with the child’s challenge, need for independence, and rebelliousness. The push back from the parent is to fight against this and try to limit independence – after all, the parent knows best (or thinks it does). Some might recognise this analogy and say that the relationship between the AAGBI and College went through its ‘parent–teenage’ stage a few years ago, when relationships were strained, though beneath this, there remained mutual respect. Of course, I could not possibly comment on the truth of this analogy, but it reminds me of a version of a quote often attributed to Mark Twain: ‘When I was 18, I thought my parents were so stupid. When I was 25, I was amazed how much they had learned in seven years!’

As the College approaches its celebration of 25 years with a Royal Charter, it shows all the signs of maturity, while maintaining the vigour of youth. It is even a parent in its own right having given birth to the Faculties of Intensive Care Medicine and Pain Medicine. Perhaps that makes the AAGBI an honorary grandparent.

Despite the occasional disagreement, over the years, the College and AAGBI have achieved much together for the benefit of our profession. We have far more in common than we have differences, and our voices raised on behalf of our specialty and its patients are much stronger together than apart. There are many examples of successful collaboration between College and Association, such as the formation of the National Institute of Academic Anaesthesia (NIAA), which is furthering scientific advancement in anaesthesia, and the formation of the Safe Anaesthesia Liaison Group, advancing the safety of our patients. In the last 12 months, we have worked closely together to support our trainees during the Junior Doctors’ dispute.
and to provide clarity around the work of Physicians’ Assistants (Anaesthesia) within the anaesthetic team.

Looking forward to the potential challenges for the future, anaesthesia continues to advance, and inevitably there will be changes to working practices in response to ever-increasing patient demand and pressures to contain the costs of healthcare. As I write, the issue of the trainee contract is not fully resolved and there remains poor morale amongst our trainee colleagues; we have yet to see what challenges a new consultant contract will provide. I hope that the AAGBI and RCoA will unite to face these challenges together.

The College and former Faculty can be proud of its many achievements and progress since its foundation 68 years ago, and together we can continue to represent and look after the safety and wellbeing of our patients and continue to strengthen our profession.

On behalf of the Association of Anaesthetists of Great Britain and Ireland, I wish the Royal College of Anaesthetists every success with its 25th Anniversary celebrations.

Enjoy!

Letter to Fellows and Members in 1988
The origins of the Royal College of Anaesthetists

Tony Wildsmith, Honorary College Archivist, 2012–2015

The granting of the ‘Royal’ accolade by Charter on 16 March 1992 was a definitive moment in the development of an independent body responsible for education, training and setting of standards in anaesthesia in Britain. The grant was the formal marker of the establishment of an exciting ‘new’ organisation, but it was equally the end of a process of seeking fully independent professional status for British anaesthetists. In celebrating the event we must recognise that it was not an isolated event, but the culmination of efforts over many decades to establish the standing of our specialty. Before the Second World War, the vast majority of anaesthetics were given by doctors who had precious little training, and practised on a part-time, even on an occasional, basis: they were anything but specialists, and this is reflected in contemporary mortality figures. However, there were a few practitioners who specialised, even at the end of the 19th century, and they started the process that we celebrate now.

All of the medical Royal Colleges can trace their origins to the Guilds of Craftsmen established in the 12th and 13th centuries, but a more specific antecedent to our College was the Society of Anaesthetists formed in London in 1893.1 Nearly 50 years after the introduction of anaesthesia into medical practice, its practitioners, led by Dr Frederick Silk, saw the need for a specialist society to help their activities and ambitions grow. The objects of the Society, the first body of anaesthetists anywhere in the world, were:

1. To encourage the study of anaesthetics, and
2. To promote and encourage friendly relations among the members.

These objects were attained by means of debates, discussions and the reading of short papers.

In 1907, fifteen other specialist medical societies joined together to form the Royal Society of Medicine (RSM), and the Society of Anaesthetists joined with them the following year, becoming its ‘Section of Anaesthetics’. Joining a larger organisation had many benefits, but the RSM was, and indeed still is, a scientific body of charitable status, and this precluded the Section from any other activity. However, by the 1930s, there was a need for an organisation to support the growing specialty, to enhance the status and training of its practitioners, and to secure better financial reward for their services. Thus in 1932, members of the Section, led by the retiring President, Dr Henry Featherstone, founded the ‘Association of Anaesthetists of Great Britain and Ireland’. One of the initial objectives of the Association,
driven by Dr [later Sir] Ivan Magill, was the establishment of a postgraduate qualification. Discussions with the Conjoint Board of the Royal Colleges of Physicians and Surgeons in London were soon successful, and the Diploma in Anaesthetics (DA) was introduced in 1935. This was the world’s first formal qualification in anaesthesia, but training and experience requirements, to say nothing of the academic standard, were well below that of a Fellowship.

These developments were very much part of a process of recognition that safe, effective anaesthesia requires specialists that are properly trained (both clinically and academically). This was perhaps not well appreciated in the armed services at the beginning of the Second World War, but the requirements of the conflict resulted in a major change. As a result, a good number of enthusiastic, trained anaesthetists were available to take advantage of the opportunities afforded by the introduction of the National Health Service in 1948. Crucial to the further development of the specialty was the principle that all specialties were to be ‘equal’ within the NHS, although long and hard negotiations were needed to establish that this applied to anaesthetists and other, so-called, ‘minor’ specialties. A major supporter was the wartime President of the Royal College of Surgeons of England (RCSEng), Sir Alfred (later Lord) Webb-Johnson, fortuitously a friend of Dr Archibald Marston, then President of the Association. Webb-Johnson saw that anaesthetists required both an organisation and a qualification of higher academic status if they were to meet the requirements for consultant status in the NHS.

Webb-Johnson proposed an upgrade of the DA by the addition of a primary examination of basic science knowledge, and the formation of a Faculty of Anaesthetists within the RCSEng. Both proposals were accepted, but bold and rapid action was required during 1947 to have them implemented quickly enough to ensure the status of anaesthetists within the NHS. Discussions with the Conjoint Board led to the introduction of regulations for a ‘two-part’ DA (modelled very much on the surgical Fellowship examination) on 1 January 1948, with the first examination being held in November. Discussions between the Association and the College led to a formal petition from the former for the formation of a Faculty, and this was quickly instituted, having its first meeting on 24 March 1948. Marston was appointed as the first Dean, with most of the other 20 members of the Board being current or past members of the Association Council. The Faculty had direct representation on the Conjoint Board for supervision of the DA examination (the Association’s role had only been advisory), and also on a number on other bodies, for example, the General Medical Council. Several committees were formed, notably one to review postgraduate education in the specialty, and a programme of lectures and tutorials – on both anaesthesia and the basic sciences – was soon in place.

All holders of the DA were eligible for membership of the Faculty and, with a postgraduate examination already in existence, the Fellowship (FFARCS) was to be awarded, by nomination ‘to those achieving distinction in the specialty’. The Board defined detailed criteria for such nomination, and there was agreement for the appointment of 150 Fellows in the first two years, with another ten each year thereafter. Thus, by the end of December 1952, 170 such awards had been made, 28 of them to eminent practitioners from overseas, and these 170 ‘Foundation’ Fellows are the initial subjects of the College’s current ‘Lives’ project. These early Fellows were vital to the development of the specialty, but most are little known now, and the project aims to rectify this by writing short biographies for display on the College website (see www.rcoa.ac.uk/lives-of-the-fellows). This all represented a rapid and significant advance in the organisation of the specialty, and many aspects introduced by the early Faculty remain with us today, but that does not mean that tensions did not develop (see reference 7).

Although the Faculty was represented on the Conjoint Examination Board, the arrangement meant that the Faculty’s supervision of its own qualification was less than ideal. In addition, there was a feeling that equality with other specialties required an examination which was a Fellowship in name, not just in claimed status. Thus regulations for such an examination were drawn up during 1953, and the first primary held towards the end of that year. This change in the naming of an examination which had changed little to start with led to some unhappiness among those who had obtained the ‘two-part’ DA. Thus, for a two-year period, special regulations allowed those who had passed the examination and had also been appointed to consultant posts in the NHS to be awarded the Fellowship without examination. The DA reverted to its previous status, but the availability of a ‘qualification’ of lower standard was to be the source of controversy for several decades before it was abolished. Initially, the primary Fellowship was almost identical to the surgical one, but with direct control the Faculty was able to develop it to reflect the true basic science knowledge needs of modern anaesthesia. The full story of the DA and Fellowship examinations is too detailed to recount here, but is the subject of a research project by the College’s Heritage Committee.

The other issues were more directly related to the event which we celebrate now – the establishment of a fully independent Royal College. The first of these issues was money. Although generating income through membership fees, examination fees, and educational meetings, the Faculty had no oversight of this income or the associated expenditure, and some found this frustrating. In parallel, there was a
growing feeling that proper recognition of the specialty’s status required an organisation of collegiate standing, especially as growing involvement in Intensive Care and Pain Management loosened the clinical association with the surgeons. The counter argument was that anaesthetists were better staying within the remit of the older, prestigious, well established RCSEng. However, the pressure for change grew, and the concept of establishing a ‘College within a College’ was introduced, establishing an independent body for anaesthetists, but set within the Royal College of Surgeons – the best of both worlds. The College of Anaesthetists replaced the Faculty in 1988, but when an attempt was made to obtain a Royal Charter it became apparent that this could only be awarded to a fully independent, geographically separate organisation.8

So was set in train the process that led to the move from Lincoln’s Inn Fields to our first home at 48/49 Russell Square, generous financial support being given by many – notably interest-free loans from both the Association of Anaesthetists of Great Britain and Ireland and the British Journal of Anaesthesia. The ‘Royal’ title was obtained, Her Majesty Queen Elizabeth II officially opened the building (8 July 1993), the letters FRCA became a proud post-nominal, and the new organisation flourished. The loans were repaid; we quickly outgrew the building, and were soon able to fund a move to the much larger one we now occupy in Red Lion Square. Today we are an organisation of over 15,000 Fellows, with Faculties of Intensive Care and Pain Medicine, and a wide range of activities as illustrated by the other articles in this edition.

Acknowledgement
This article is an extended and revised version of one on the Heritage section of the College website.

I thank Dr Aileen Adams and Dr W R MacRae for reviewing the script.

References
7 Primary records of the Faculty’s activities are lacking, apparently having been lost in the move from Lincoln’s Inn Fields. However, research in the library and archives of the RCSEng has revealed that the minutes of both their Council and the Conjoint Examination Board include much information on the Faculty. By courtesy of the RCSEng, the RCoA now has scanned copies of all of these documents relating to anaesthesia. A preliminary review of this material was used in the preparation of this article.
Forty years on
The Final FRCA Course, with some observations on cardiovascular risk and the management of that risk

Pierre Foëx, Emeritus Nuffield Professor of Anaesthetics, University of Oxford

The Final FRCA course started in the early 1950s. Initially it ran over two weeks, with formal lectures followed by tutorials in the late afternoon. This was still the format when I was first asked to lecture on the course in 1976. At the time, there were 40 lectures (75 minutes each) and 10 one-hour tutorials. Registration cost £39.80 for the lectures alone, and £63.50 for the lectures and the tutorials. For the tutorials, participants were divided into groups of eight, and had the same tutor for both weeks. In the 1970s, a blackboard and X-ray viewing box were provided. By request, an overhead projector could be made available. Occasionally, two tutors led the group for one week each. The tutorials were a most enjoyable part of teaching on the course, as tutors spent time with trainees from other departments, and over a week got to know them quite well.

Later, the duration of the course was increased to three weeks with, 75 lectures each of 60 minutes. By 2004 it was back to two weeks with only four tutorials and still over sixty 45-minute lectures. Finally, in 2012, the course reached the present one-week format, with four tutorials and 36 or 37 lectures of 40–45 minutes. With all the examination preparation material available on the College’s website, today’s much shorter course does not mean that candidates are short-changed by the College in their preparation for the examination! The location of the course changed over the years. Forty years ago it was at the Royal College of Surgeons in Lincoln’s Inn Fields, where the offices of the Faculty of Anaesthetists were located. There was a lecture theatre and several rooms, including dissection rooms, for the tutorials. When the College became independent and relocated to Russell Square in 1992, the course was held in a number of different lecture halls in university departments close to Russell Square, and the tutorials were held at the College. With the move to Churchill House in 2006, the Final FRCA Course benefitted from greatly improved facilities.

What about the teaching itself?
The format of lectures has probably not changed all that much, though their content certainly has! In the mid-1970s, while overhead projectors were still
popular, many lecturers preferred to use slides, mostly of the diazo variety (white on blue), or negative slides (white on black). Colour slides appeared later. Gradually, PowerPoint took over from photographed art work, and from them slides were produced. It is over the last 10–15 years that the universal availability of digital projection made slides redundant. Gone were slide projectors, straight slide cassettes and carousels! Moreover, presentations could include animations and video clips. This made education more entertaining, and hopefully more valuable.

These were important changes, yet over the past four decades there have been many more significant changes in anaesthesia, perioperative care, medicine and surgery. Having taught mostly on the cardiac risks of anaesthesia and surgery, and cardiovascular measurement, I would like to place the extent of these changes into perspective.

One of the most frequent co-morbidities in surgical patients remains arterial hypertension. In the early 1970s, it was customary to stop all antihypertensive medications, especially beta-blockers, two weeks before elective surgery. The notorious instability of the circulation in hypertensive patients was blamed on their medication. The most commonly prescribed antihypertensive agents were methyldopa, bethanidine, and the diuretic navidrex-K. With the policy of stopping all hypertensive therapy, and preferring patients on no treatment, it is not surprising that extreme instability was very frequent. Many patients presented for surgery with blood pressures of 220/120 mmHg or even higher! Perioperatively, dysrhythmias and myocardial ischaemia were extremely frequent, especially at the time of laryngoscopy and tracheal intubation. In the mid- to late seventies, it became clear that maintaining the antihypertensive medication was preferable, yet there were serious doubts about the wisdom of maintaining treatment with beta-blockers. These reservations were finally overcome based on detailed observations of the circulation during anaesthesia and surgery in treated and untreated patients, including their responses in the face of beta-blockade. It then became customary to maintain the antihypertensive therapy, including beta-blockers, because of better cardiovascular stability. While beta-blockers were first-line treatment for hypertension for at least two decades, their inferiority in terms of long-term cardiovascular protection led to their ‘relegation’ to fourth-line treatment, except in patients with coronary artery disease. Forty years on, treatment of hypertension in the population is far more effective, though many patients still present for surgery with only partly controlled hypertension. Fortunately, few would exhibit blood pressures above 180/110 mmHg. While maintaining the antihypertensive medication is now accepted practice, the most recent guidelines suggest that ACE inhibitors, and more importantly angiotensin receptor antagonists (ARAs) may need to be stopped shortly before surgery to minimise the risk of intractable hypotension. Thus, in the perioperative management of hypertensive patients there have been spectacular U-turns and some zig-zags!

Another example of changes relates to the management of patients with previous myocardial infarction. In 1972, a landmark study by Tarhan et al showed that patients who were operated on within three months of acute myocardial infarction had a 37% re-infarction rate. This rate decreased to 16% at three to six months after infarction, and remained at 4% to 5% when infarction had occurred more than six months previously. Thus a delay of six months was regarded as essential to minimise the risk of re-infarction; one year was considered a better option. Ten years later, Rao, Jacobs and El-Etr reported
40 years ago. Multidisciplinary approach hardly existed of such patients. The concept of a especially important in the management if these agents are stopped. It is now is maintained, and of stent thrombosis bleeding, if dual antiplatelet therapy consideration of the balance of risk of longer applies without very careful of three months or even six weeks no Guidelines even indicated that four to six weeks may be adequate if, after uncomplicated myocardial infarction, there was no ischaemia on a stress test. Thus the management of patients with myocardial infarction appeared to have become much easier. However, the past ten years have seen a profound change. While fibrinolysis and beta-blockade were for 20 years the treatments of choice for acute myocardial infarction, the development of primary percutaneous coronary intervention (PCI) with insertion of coronary stents introduced a new challenge. Primary PCI is highly beneficial but, should patients present for surgery, introduces the problem of dealing with dual antiplatelet therapy. As the latter is normally given for 12 months after acute coronary syndromes, the previously accepted short delay of three months or even six weeks no longer applies without very careful consideration of the balance of risk of bleeding, if dual antiplatelet therapy is maintained, and of stent thrombosis if these agents are stopped. It is now clear that a multidisciplinary approach is especially important in the management of such patients. The concept of a multidisciplinary approach hardly existed 40 years ago.

**Anaesthesia itself has changed**

In the early 1970s, halothane was the most widely used inhalation anaesthetic. As it sensitises the myocardium to the effects of catecholamines, dysrhythmias occurred in a very large proportion of patients (up to 60%). Unsurprisingly, any rhythm other than sinus was regarded as a major risk factor in the cardiac risk evaluation introduced by Goldman et al in 1977. My personal experience of anaesthesia for carotid endarterectomy under halothane anaesthesia was that I could have written a textbook of arrhythmias based on my perioperative records in such patients! The introduction of isoflurane reduced the risk of dysrhythmias and, unsurprisingly, they do not appear in the more recent cardiac risk indexes. Phenoperidine was a frequently used opioid in the 1970s, later replaced by fentanyl, sufentanil, and remifentanil. Induction with thiopental was almost universal, and this was gradually replaced by propofol. The conventional combination of opioid, nitrous oxide, and an inhalation anaesthetic was undisputed. Total intravenous anaesthesia did not exist! Muscle relaxation relied on pancuronium.

A cause of cardiac complications of anaesthesia and surgery was the absence of effective means of maintaining the patient’s temperature during long operations. In the late 1970s, a warm-water circulating mattress was used but was not very effective. Not surprisingly in the mid- and even late 1970s, many patients lost heat during prolonged surgery and shivered during recovery. Shivering to regain heat is associated with a doubling of oxygen consumption; the heart may not be able to cope. Today, avoidance of hypothermia is a priority and, thanks to forced-air warming, shivering has become unusual. In the early 1970s monitoring was limited to ECG and, where appropriate, invasive arterial pressure sensing (although in most cases the line was inserted after induction of anaesthesia). The expensive and rather bulky transducers were not disposable, and after each use were ‘sterilised’ by filling them with activated glutaraldehyde solution – mind-boggling in terms of potential hazards! Central venous pressure was measured by connecting a drum-cartridge catheter (inserted at the antecubital fossa) to a three-way tap, to which were attached a unit of normal saline and a graduated glass tube. By turning the tap toward the patient, the height of the saline column in the graduated glass tube represented the central venous pressure, assuming that the catheter had gone into the superior vena cava and that the base of the column was positioned at the level of the right atrium. Introduction of disposable pressure transducers made pressure measurements much easier. Pulse oximetry and capnography existed then only as research tools. Measurement of cardiac output relied on dye-dilution using indocyanine green. Setting up for cardiac output measurement was complex and time-consuming. Although the balloon-tipped pulmonary catheter had been described in 1970 for the measurement of the pulmonary artery wedge pressure, it was only in 1972 that it was modified to include thermistors, paving the way for thermodilution measurement of cardiac output. Yet it was only in the very late 1970s that it started to be regarded as the ‘gold standard’. It is only much later that less invasive monitoring of cardiac output such as oesophageal Doppler appeared. Relying on the pulse contour method and intermittent calibration, for example with lithium dilution, allows cardiac output to be estimated continuously – a far cry from the indocyanine dilution!

The risks of cardiovascular complications associated with tachycardia and hypertension were well known in the 1970s. This explained the increasing popularity of beta-blockers in patients with hypertension and coronary artery disease. Indeed, perioperative beta-
blockade was strongly recommended in early 1990s guidelines. Beta-blockade in surgical patients at risk for coronary artery disease was even regarded in the USA as an index of the quality of care. This had been based on many small randomised controlled trials, but was ‘overturned’ by a large RCT – the POISE (Perioperative Ischemic Evaluation) study – with more than 8,000 patients. The trial showed that the price to pay for cardiac protection was increased mortality and risk of stroke. Again, this meant a complete U-turn. Beta-blockers had been on the way up for 30 years and were now on the way down. The greatest paradox is that the best indication for beta-blockers is heart failure, regarded in the past as the greatest contraindication!

Optimal management of the circulation in patients with coronary disease has also evolved. An editorial in Anesthesiology in 1976 by Dr William Hamilton, one of the most respected anaesthesiologists in the USA at the time, was entitled: ‘Do let the blood pressure drop, do use myocardial depressants’.

The reasoning was that reducing blood pressure and contractility greatly improved the oxygen balance of the myocardium. However, there is a systemic pressure below which coronary perfusion declines more than oxygen demand. Studies have shown that hypotension is associated with increased mortality in patients with, or at risk of, coronary disease. Even short periods of hypotension are potentially hazardous: perioperative hypotension could no longer be encouraged. Maybe cardiologists were right in suggesting that we should avoid hypotension and give plenty of oxygen!

Over the years the College has changed, the course has changed and medicine has evolved; what has been constant is the support of the staff of the College, and this has made it a real treat to remain involved for 40 years.
From Newsletter to **Bulletin**
27 years of College publications

Ron Jones, Formerly Professor of Anaesthesia, St Mary’s Hospital Medical School and Imperial College, London

In 1988, the Faculty of Anaesthetists of the Royal College of Surgeons of England became the College of Anaesthetists. An early goal of the College was to establish its own regular publication in order to communicate College news to its Fellows. The first issue of the *Newsletter* appeared in February 1989, and consisted of two pages plus a cover. Dick Atkinson from Southend continued to develop the *Newsletter* as did subsequent editors, John Norman in Southampton, Doreen Browne at the Royal Free Hospital, and Gareth Jones in Cambridge.

There were several significant developments in College affairs taking place when I became editor in the late 1990s; the requirements for continuing professional development for consultant and sub-consultant grades, changes to training and examinations leading to the award of Fellowship of the now Royal College, and in national manpower planning. After discussion with the President, it was decided that the *Newsletter* no longer fulfilled the purpose of reflecting the role of the College and its interface with all elements of the specialty, including consultants, the various sub-consultant grades, and trainees. Therefore, reflecting on how best to signal the evolving role of the College’s communications, I did some etymological research. During the Napoleonic Wars, dispatches sent from the front and meant for the home public were called ‘Bulletins’ from the Italian ‘bulletino’, meaning document and derived from the Latin ‘bulla’ - a seal attached to an official document such as a Papal Bull. It seemed to me that ‘Bulletin’ sounded a bit more substantial and I found its derivation from a Papal Bull rather appealing (albeit perhaps not entirely appropriate). The first issue of the *Bulletin* of the Royal College of Anaesthetists appeared in May 2000.

Looking back at that issue, I am struck by two things. First, the accompanying photographs show what the passage of 16 years and 100 issues of the *Bulletin* have done to RMJ; he is now a care worn, bombed-out, elderly pensioner (see recent photograph above). And second, and much more important, it’s wonderful to see that despite all the changes of College personnel over 16 years, Mandie Kelly is the one constant element (Hi Mandie!). Mandie really was a tremendous help in getting the *Bulletin* ‘up and running’ (I used to send editorial assistants for the various publications for which I have been responsible a copy of the Guardian Book of Style; under clichés it notes: ‘clichés should be avoided like the plague’).

Like editors the world over, in order to develop what I hoped would be an informal and not too stuffy house style, I wrote a proportion of the early issues of both the *Newsletter* and *Bulletin* myself. This was, in the time-honoured fashion, often under a pseudonym. Sitting one evening on my boat in Portsmouth Harbour, I was editing manuscripts and listening to VHF Channel 12 (Southampton VTS – vessel tracking service) when I heard that the harbour’s dredger, the Donald Redford, had struck Hythe Pier, the skipper being ‘a bit the worse for wear’ at the time. It struck me that the name ‘Donald Redford’ sounded nicely imposing and responsible, perhaps a colleague at a teaching hospital, and a member of the ethics committee, etc. So ‘Donald Redford’ wrote a regular column and it was that highly respected colleague who conveyed to us all several completely useless bits of information, such as the fact that the lunatic philosopher, Ludwig Wittgenstein, worked as a porter in Guy’s Hospital during the Second World War. I subsequently read Wittgenstein’s impenetrable *Tractatus Logico-Philosophicus*. The bizarre sequence of events that led from my reading of Wittgenstein to the synthesis of Investigational Compound number 635 – desflurane, is related in Ted Eger et al’s recent book on the history of anaesthesia, ‘The Wondrous Story of Anesthesia’.

Perhaps I may be permitted at this juncture to beg the reader’s indulgence and correct a widely held belief that it was Oliver Wendall Holmes (Sr) who coined the term ‘anaesthesia’. One-time Dean of Harvard Medical School (1847–1853), he undoubtedly wrote a letter to WTG Morton on 21 November 1846, after Morton’s successful demonstration of the use of diethyl ether for surgical
procedures. Although the original letter has been lost, copies of it exist. In it he wrote:

‘My Dear Sir: Everybody wants to have a hand in a great discovery. All I will do is give you a hint or two as to names – or the name – to be applied to the state produced by the agent. The state should, I think, be called ‘Anaesthesia’. This signifies insensibility – more particularly (as used by Linnaeus and Cullen) to objects of touch.’

However, there is little doubt that the word ‘Anaesthesia’ was familiar before its association with ether-induced unconsciousness. For example, the word appears in patient case reports of a Dr Gregory of Edinburgh published in 1808. And there are other documented uses of the word in the year preceding the letter Holmes sent to Morton. There are several reviews of the Greek origins of anaesthesia (αν-, without and αισθησις, sensation), the first documented use being by Hippocrates (c.460–c.360 BC). The Hippocratic Collection of 60 medical texts contains 12 references to the word anaesthesia to describe loss of sensation by a disease process. Other Greek physicians and philosophers in the ensuing centuries used the word in precisely this context. That it is familiar in more modern times is probably due to Pedanius Dioscorides, a Roman physician of Greek origin whose ‘De Materia Medica’ (written 50–70 AD) was widely read for over 1,500 years. Thus, in a sense, the foundations of our specialty were laid two and a half millennia ago on the island of Kos and handed down by Greek physicians until the word’s meaning was only slightly altered by Oliver Wendall Holmes to include the state of insensibility produced by ether.

The usage of the word continues to evolve, and it has now entered the lay lexicon. I’ve been reading a lot of HG Wells recently, and in the ‘Wheels of Chance’ he writes: ‘Self deception is the anaesthetic of life...’. A recently deceased colleague of mine, Donald Redford, that stalwart of the local ethics committee, was an avid reader of HG Wells. Donald, only some months before his tragic death falling from Hythe Pier, related an interesting and little known aspect of Herbert George’s teenage years. He was born in Debenhams in Bromley in 1856 and as a teenager was an acquaintance of Napoleon III who lived a few miles away in Chislehurst (where he died in 1873). According to Donald, both Wells and Napoleon were keen football fans and used to go together on a Saturday to watch their local team, Gillingham, play down by the River Medway at Priest’s Field. It was Donald’s peculiar insights, such as this and his passion for Wittgenstein, which mean he will be sorely missed. But we should return from our travels in time and place which have taken us from Kos, via Boston, to the River Medway, and return to Red Lion Square in 2016.

I have watched with a paternal interest how the editors who came after me have kept the Bulletin evolving into something relevant to all sections of our profession. Thus I was delighted to see that the last Bulletin that Simon Fletcher was responsible for in May was a trainee-led edition, full of useful, well-written articles, and with an additional emphasis on the role that lay members of Council have in the College’s activities.

So I wish the current editor every best possible good fortune in what is a delightful role; without my nose growing too long, I can say I never found editing the Bulletin anything other than enjoyable. As a last thought, I wonder whether the cloak of writing under a pseudonym might be resurrected. The name Edmund Norgay has a certain resonance, Monty. Let us hope that the likes of Donald Redford and Edmund Norgay continue to allow the Bulletin to continue to thrive – and to not get too worthy and serious.
Women in medicine: a brief history

Melanie Jones, Retired Consultant Anaesthetist, previously RCoA Bernard Johnson Advisor for Less Than Full Time Training (LTFT) and Past President of the Medical Women’s Federation

‘The Medicine Woman holds the moon in her hands. Her time, sympathy, knowledge and grace give lavishly to the unwell, for the interest of all humanity’
– Iroquoi tribal saying

From pre-history to the Victorian age

Female shamans are described in ancient civilisations across the globe – South and North America, China, Russia, Africa, Australia, and Europe. These women were held in high regard for their knowledge of herbs and remedies, and reached high status in their societies. In Greco-Roman times women still practised medicine, often specialising in obstetrics and gynaecology. But these were the minority, often learning their skills from their fathers and husbands. Philista, a popular professor of medicine in Ancient Greece, delivered her lectures from behind a screen so her beauty did not distract the listener.

Despite male dominance of the profession, female physicians and surgeons are recorded in Islamic medicine between the 11th and late 15th centuries. During the Dark Ages and medieval times in Europe, convents provided an environment in which women could study and research in medicine and botany. Yet, once universities were established, women were systematically excluded from learning, and medicine developed into a male-only profession. Throughout Europe, women continued to practise healing using traditional remedies. Called ‘wise women’ by their communities, they nevertheless faced brutal persecutions and even death following charges of witchcraft by the doctors.

Whilst women remained barred from medical practice, there was one notable exception, Dr James Barry, who was born some time in the late 1700s and attended the Edinburgh medical school, graduating in 1812. He joined the British Army in 1813 after passing his Royal College of Surgeons exams, and by the end of his career had reached the rank of Inspector General of Hospitals. Only after his death in 1865 was ‘he’ found, by the servant who laid out his body, to be female having concealed his gender for over 50 years. Dr Barry is credited with improving the conditions and health of the troops, and was remembered for his caring manner and professional skills. The British Army sealed all records relating to Dr Barry for 100 years.

In 1863, Elizabeth Blackwell said in an address at the New York Infirmary –

‘A blank wall of social and professional antagonism faces the woman physician that forms a situation of singular and painful loneliness, leaving her without support, respect or professional counsel.’

It fell to several notable pioneers to break the stranglehold of the universities, who continued to deny entry to medical training for women –

- Elizabeth Blackwell, born in Bristol, was the first woman MD graduating from Geneva Medical College in New York State in 1847. The faculty assumed that the all-male student body would never agree to her admission, but they voted yes as a joke. By 1867 she had opened a medical college for women and an infirmary to care for poor women and their children. She was also the first woman on the UK medical register.

- Elizabeth Garrett Anderson was the first woman doctor to qualify in England. She attended classes at the Middlesex Hospital but was barred after complaints from male students. She passed the Society of
Apothecaries exam in 1865 but they then changed their rules to exclude women, so she went to France to obtain her medical degree. Returning to the UK she established the New Hospital for Women and the London School of Medicine for Women.

Sophia Jex-Blake was admitted to Edinburgh University in 1869, having passed the matriculation exam. However, she faced continued opposition to her presence from lecturers and students – on one occasion there was even a riot in the streets. Defeated by bureaucracy she took her final exams in Berne. She also founded a hospital and a medical school for women. In 1894 Edinburgh University finally admitted women to study medicine.

In 1879, the nine female doctors in the UK founded the Association of Medical Women, and in 1917 this became the Medical Women’s Federation with 190 members.

The 20th Century

The UK government’s attitude to offers of help from women doctors throughout the First World War was, at best, unwelcoming, even though several medical schools had opened their doors to female students. After the war, the doors to some medical schools closed again and, even when qualified, many employers enforced dismissal of women doctors after marriage.

In 1930, London County Council decreed that all medical appointments should be open to men and women, 1933 saw the first woman doctor elected to the General Medical Council, and in 1946 the first female doctor elected to the British Medical Association Council. The arrival of the NHS after the Second World War heralded the opening of medical schools to women, albeit with a quota system of 20% applied by most. The number of female consultants began to increase, and these role models established that gender was no barrier to success. Exceptionally, a few women began to take on leadership roles in the profession. In 1948 Dame Hilda Rose became the first female president of the Royal College of Obstetricians and Gynaecologists, and in 1979 Dame Josephine Barnes was the first female president of the British Medical Association. Dr Aileen Adams, appointed consultant anaesthetist at Addenbrookes in 1960, was elected the first female dean of the Faculty of Anaesthetists in 1985. Throughout the 1950s and 1960s women doctors still felt the imperative to choose between career progress and having children. Doctors who had children frequently took part-time work, stepping off the career ladder and returning to work in hospital assistant roles. Women GPs frequently ran partnerships with their husbands, with a surgery in the family home. In 1962, an advisory service was established to support those who wished to work part-time or to return to practice. By the 1980s specific funding had been identified to support part-time women trainees, and in 1989 there was funding for 20 supernumerary training posts for women (this was for all specialties across the UK). Routine access to Less than Full–Time (LTFT) training gradually increased, thanks to pioneers such as Dame Rosemary Rue from Oxford, who championed the retention of women doctors in the workplace by instituting flexible working programmes in the face of considerable opposition.

The 21st Century

In the past decade many Royal Colleges have elected a female president, and the medical workforce gender balance has equalised, with more women than men entering the profession. It is predicted that women doctors will outnumber their male colleagues by 2017, yet there is a variation of gender balance according to specialty, anaesthesia having roughly equal numbers of men and women across all grades. Career progress is influenced by exam pass-rate, and in 2009 Bowhay and Whatmough showed that women performed significantly less well than men in all parts of the Primary FRCA examination; they explored possible reasons such as part-time training, less risk-taking behaviour and greater work-life balance demands.

Flexible training

For some specialties, the concept and introduction of part-time training has been particularly challenging, whereas specialties such as paediatrics, anaesthesia and general practice have adapted well to part-time working, and this has now become the norm for many of their trainees. It is not just women who benefit from LTFT training, as more young male doctors report a desire to work LTFT for parental reasons but are worried about the impact on their careers, and it must be remembered that LTFT also supports doctors with health and disability issues to remain in the workforce. Anaesthesia has supported LTFT training over many decades and 12% of current trainees in anaesthesia work LTFT (GMC trainee survey, 2015) with most working 60–80% of whole time. Within the RCoA there is a consultant appointed to the role of Bernard Johnson Advisor for LTFT who sits on the Training Committee.
ensuring equity of training for LTFT trainees, and this role is supported by a network of LTFT advisors who sit on their respective Schools of Anaesthesia committees. There is also a LTFT lead on the GAT (Group of Anaesthetists in Training) committee of AAGBI. A complete overview of LTFT in anaesthesia is available in the RCoA A–Z guide.4

Women in academic medicine and the gender pay gap

Whilst there are equal numbers of men and women in early years medical academic posts, women are still poorly represented at the highest levels and are less likely to progress into senior positions. This is probably related to the fact that the period of greatest academic productivity coincides with those years when women have children, and so take career breaks or make the decision not to continue in academic work. Dr Anita Holdcroft, Reader in Anaesthesia at Imperial College, led a national collaboration to explore the issues affecting female academic careers. A 2008 report on career progression made clear recommendations on the need for mentoring, role models, flexibility in working patterns, and the requirement for gender monitoring of appointments and promotions. In 2009 a second report on the gender pay gap for women in medicine and academic medicine2 showed that in academia women earned 17% less than men, whereas women in the NHS earned 21% less than men at the same grade. In July 2011, the Chief Medical Officer, Professor Dame Sally Davies, announced that the National Institute for Health Research (NIHR) would only expect to shortlist medical schools for biomedical research centre and unit (BRC and BRU) funding if the school holds a Silver Athena SWAN Award (an award that recognises success in the achievement of gender equality). All UK medical schools now have to demonstrate their commitment to advancing the careers of women and promoting gender equality in all areas of their work.

Improving the lives of women doctors

‘Women Doctors: Making a Difference,’6 (the Deech Report), was published in 2009. This report explored the challenges faced by women doctors in the 21st century and made the following recommendations:

- Improve access to mentoring and career advice.
- Encourage women in leadership.
- Improve access to part-time working and flexible training.
- Workforce planning to take account of increasing numbers of women in the medical profession.
- Improve access to childcare.
- Improve support for carers.
- Implementation of these recommendations will improve the working lives of all doctors, not just women.

Future challenges

There is often a heavy sigh and a shrug when doctors tell their employers they are pregnant. There is considerable role conflict experienced by medical mums – they are selected for altruism, but not trained in how to deal with conflicting demands from work and home. As nursery/school closing time approaches, the level of anxiety in the doctor-parent rises – patient care or collect kids? It is usually mothers who take responsibility for organisation of child care, and grandparents often move close to their medical offspring to help with childcare. In later years, it is more frequently daughters who care for elderly parents. Good employers, departments and trainers recognise these stress points and make adjustments.

Women are less mobile geographically, and more likely to follow their husbands’ careers. Many women doctors have non-medical partners, which can influence recruitment, as women doctors may not apply for jobs in areas where their partners can’t find employment, or are reluctant to leave areas where their partners are employed. Young women doctors in training cannot be expected to conform to professional and organisational expectations of full-time work based on historical 19th century norms. Indeed, women with successful careers will negotiate a career path that fits with their self-defined quality of life goals and measure success in their own terms. Changes to patterns of work and greater flexibility will benefit all, as men also begin to express their need for an improved balance between work and life.

The Sandwich Generation is a term used to describe those facing the challenge of caring for elderly parents as well as their children. The NHS acknowledges that responsibilities as a carer place demands on older doctors caring for elderly parents, and the lessons learnt from accommodating young doctors wishing to work part-time are equally applicable to supporting retention of older workers. Anaesthesia, as a result of a long history of encouraging flexible working and adapting schedules to accommodate a variety of working patterns, is well placed to support its older doctors with flexible working.
The continuing fight for gender equality again emerged during the junior doctors’ contract dispute in 2015-16, when it became apparent that the initial proposals were discriminatory against women doctors and part-time trainees. The whole profession united to decry the lack of an Equality Impact Assessment and the hashtag #likealadydoc was frequently seen on social media.

In 2014, the King’s Fund hosted the Advancing Women in Medicine summit,7 which was targeted at developing the diversity of leadership in the profession and showcasing how far women in medicine have come since those few brave pioneers in the late 19th century. In 2016, evidence of the continuing gender pay gap in medicine was presented to the House of Commons Women and Equalities Committee.8 The Medical Women’s Federation celebrates its centenary in 2017, and, whilst the medical profession has much to be proud of, there is still work to be done and barriers to overcome.

‘No doctor should be wasted because they cannot find a place in the system that is compatible with their other roles as a parent and partner, and no doctor should be lost to medicine because of obstacles in the way of finding the right professional placement. We should make our goal a profession where every woman and every man goes as far as they wish and as far as their talents permit.’
– Deech Report 20096

References
3 An evaluation of the performance in the UK Royal College of Anaesthetists primary examination by UK medical school and gender. BMC Medical Education [http://bit.ly/2bMDzMi].
RCoA Global Partnerships – the legacy of Bernard Johnson

Jeremy Langton, RCoA Vice-President and Chair, Global Partnerships Committee
Jo James, RCoA Bernard Johnson Advisor for Global Partnerships
Maria Burke, RCoA Global Partnerships Supervisor

Bernard Richard Millar Johnson FRCS, FFARCS, DA travelled extensively during the Second World War as a member of the Royal Army Medical Corps, working in West Africa, the Middle East and the European Campaigns in Italy and Normandy. It was during this time that he was able to experience first-hand the challenges of providing safe anaesthesia care in resource poor environments.

Dr Johnson became a council member of the AAGBI in 1943, going on to become honorary treasurer from 1947 to 1950. He then became the second Dean of the Faculty of Anaesthetists of the Royal College of Surgeons of England in 1952 and remained Dean until 1955. Dr Johnson was crucial to the creation of the Faculty, and was also responsible for setting up, and seeking financial support for the first research department for anaesthesia, housed at the time at the Royal College of Surgeons of England. As Dean of the Faculty, Dr Johnson contributed to the design and implementation of the FFARCS examination, which demonstrated well his passion for education, training and research.

Following his sudden death in 1959, the Bernard Johnson Memorial Fund was established in 1961 to endow a Faculty Advisor in Postgraduate Studies – the origin of the RCoA Bernard Johnson Advisors. The RCoA currently has three Bernard Johnson advisors: for Academic Training, Less than Full-Time Training, and Global Partnerships.

The Global Partnerships (formally known as International Programmes) work of the RCoA has previously been limited, focussing on the Medical Training Initiative (MTI), which allows overseas-trained doctors to come to the UK to complete training in anaesthesia for a maximum of two years, after which doctors return to their home country to utilise the skills they have learnt while in the UK. Prior to the MTI, the RCoA ran the successful Overseas Doctors Training Scheme, which began in the mid-1990s. The College is extremely proud of its
MTI scheme, which has consistently received positive feedback both from MTI doctors and from their trainers working in UK Hospitals. The popularity of the scheme continues to grow, and as of the end of July 2016, 44 MTI doctors have been appointed to the scheme.

In addition, the RCoA Global Partnerships department has had involvement in the development of a number of fellowships for UK trainees wishing to take time Out Of Programme (OOP) in a Low to Middle Income Country (LMIC). These fellowships have been developed in partnership with a number of organisations such as Lifebox, Mercy Ships and Facing Africa. These high-quality placements have robust recruitment and QA processes in place which ensure the best possible experience for the trainee and the vulnerable patients they will be treating.

A Unit of Training (UoT) was developed as part of the 2010 Anaesthetic Curriculum [http://bit.ly/2cPChwK] for a CCT, which allows up to six months of this time on an OOP to be counted towards training.

Other programmes have used this UoT for programmes they have developed, and the RCoA has endorsed these. These include the Zambian Anaesthetic Development Programme (ZADP) and Médecins Sans Frontières (MSF).

The Global Partnerships team will continue to develop and strengthen these fellowships. It will develop strong partnerships with global organisations and NGOs to facilitate this. In addition, the team can offer advice and guidance to any UK doctor considering working or training in an LMIC.

**What is the role of the Global Partnerships department?**

As alluded to above, the Global Partnerships remit has now expanded. Following the publication of the Lancet Commission’s report *Global Surgery 2030* in 2015, it is clear that there is an unmet need for development of and investment in surgical services across the world, with the report quoting that five billion people across the world do not have access to safe, affordable surgical and anaesthesia care services when needed. This shocking figure equates to 70% of the world’s population.

Whilst previously surgery was not a topic frequently discussed as part of Global Health discourse, this is already beginning to change. 2015 also saw the launch of the Sustainable Development Goals (SDGs), which supersede the earlier Millennium Development Goals (MDGs). The SDGs are much broader in scope than the MDGs. Of particular relevance to the RCoA are:

- **Goal 3:** ‘Ensure healthy lives and promote well-being for all at all ages.’
- **Goal 4:** ‘Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.’
- **Goal 17:** ‘Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development.’

These principles have been central to the development of the Global Partnerships strategy. Particularly important, is the College working in partnership with other institutions, particularly those based in LMICs who have the greatest understanding of the situation on the ground.

**So what will we be doing?**

The RCoA will continue with its existing work with the MTI and the provision of fellowships in LMICs as outlined above. In addition, it will be expanding its workstreams into the following areas –

**Supporting training and education of anaesthetists in LMICs**

We will forge stronger links with organisations who already deliver training programmes in LMICs. For example, ZADP, Lifebox, Safer Anaesthesia from Education (SAFE) and Mercy Ships. In addition, the RCoA is teaming up with the World Federation of Societies of Anaesthesiologists (WFSA) in a number of project areas, including the provision of quality assurance review of existing Fellowships outside of the UK.

The RCoA has developed a link with the College of Anaesthesiologists of East Central and South Africa, and is in the early stages of discussions with them to see how the College might be able to aid teaching and training in Sub-Saharan Africa.

**Training the trainers and/or curriculum development (for LMICs and high-income countries)**

The RCoA will be working with partner organisations to provide assistance in curriculum and assessment development which is suitable for local needs. When required, they can provide a Training the Trainer package to equip trainers with the necessary knowledge and skills to implement the new curriculum and/or assessment methods.


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[Image of Dr Bernard Richard Millar Johnson]
This will build on the RCoA's previous experience. In 2013, a five-day course was held at the College for nine Educational Supervisors (ESs) from Iraq, who hoped to resurrect quality training in their country following decimation by the string of wars in that region.

The course contained many important elements of teaching and training; the delegates were able to observe the Primary FRCA examination, and each had a short period of clinical observation at a variety of hospitals.

Since the course was held, the ESs have redesigned their training structure and have increased recruitment and retention to the specialty. The College continues to support them.

**e-Learning and other educational tools**

The RCoA has been in the forefront in the development of e-learning for anaesthesia. It has a platform of approximately 1,000 e-learning sessions and an associated library (e-LA), which is administered through e-Learning for Health (e-Lfh). More recently there have also been developments of e-learning in intensive care medicine (e-ICM) and pain medicine (e-PAIN).

In 2013, ‘e-SAFE’ was produced in collaboration with the AAGBI. This is a DVD which is free of charge and is aimed at educating anaesthesia providers in LMICs, including non-physicians, who make up the majority of the anaesthetic workforce in LMICs. It contains nearly 100 e-learning sessions, a selection of educational videos and a large library of relevant articles. It has proved to be a huge success and the content and format is being reviewed and updated at present.

In 2016, another ‘package’ known as e-LA LITE, was produced, which is aimed at physician anaesthetists in LMICs. Part of it contains 100 sessions from the main e-LA platform, and it will particularly focus on paediatric and obstetric anaesthesia. It will be very low cost and marketed through e-integrity – the non-profit making arm of e-Lfh.

There is a hunger for more e-learning packages to be developed for anaesthesia providers in LMICs, and the RCoA is committed to developing these. In addition, there is scope for more development of, for example, podcasts and webinars, at which the RCoA excels.

**Members and Fellows**

The College intends to engage further with its international members, particularly around matters concerning access to safe anaesthesia, and to expand its international membership. The College would view member involvement in the projects outlined above as key to its success.

The College would be very keen for UK-based members who are interested in getting involved and supporting this work to get in touch with the Global Partnerships department.

This article gives just a taste of what is to come in the future. For more information please see the Global Partnerships strategy available from the Global Partnership pages on the RCoA website. Our plans are ambitious, but in this global society in which we live, absolutely necessary. We would hope that, if Dr Bernard Johnson were alive today, he would be proud of our plans and the work that we will be undertaking.
Twenty-five years on: excerpt from the Bulletin, 1 April 2042

Sebastian Parrott

Princess Charlotte opens the RCoA’s Museum of Curiosities

The President and Council Members were delighted to welcome the College’s patron, HRH Princess Charlotte of Wales, to New Churchill House on 29 February 2042 to open the new exhibition in its museum, called the ‘Museum of Curiosities’. In this interview, we talk to the College’s Honorary Curator and Archivist, Dr Richard Marks, about the new extension and what it contains.

As we approached the Museum, Dr Marks commented –

‘Anaesthesia, like any medical specialty, has great ideas and new inventions that seem a really good idea at the time but which later prove to be not quite such a good idea, and perhaps even a really bad idea. Take bloodletting for example. The practice started about 1000 BC and continued until as late as the latter part of the 18th century in some parts of Europe. Nearly two thousand years of doing patients positive harm, until it dawned on us that blood was fundamentally a good thing that worked best when it was left in the circulation. What we have done is take a long hard look at practices in anaesthesia over the years that we have abandoned because they proved not to be as effective as we initially hoped, and we have put them all together in a new exhibition.’

We walked through the door to the museum’s exhibition area and there on a pedestal in front of us was a gleaming, brightly-lit, metal device the shape of a shoebox but several times larger. Rubber pipes and hosing emerged from it, and it was adorned with chrome sliders, knobs and levers.

‘This is a Manley Ventilator’, said Dr Marks, ‘It dates from about 1964. The ventilator in itself was a great idea, but this bit here was a really bad idea. It allowed you to apply NEEP.’

‘It is, but it is also an acronym for Negative End-Expiratory Pressure. When you ventilated the lungs of patients with obstructive airways disease, you got something they called ‘gas-trapping’ – the lungs would incompletely empty because of the obstructive airway disease, and there was concern that this would obstruct venous return and adversely affect cardiovascular function. ‘The solution as they saw it was simple – suck the gas out of the lung at the end of expiration.’

‘Didn’t it work?’

‘It did, sort of, but it also sucked out the functional residual capacity and caused widespread lung unit collapse and hypoxaemia, which we didn’t really notice because pulse oximeters had not been invented. It was scrapped as a ‘good idea’ in the early 1970s.’

‘Fascinating. What is that long, thin, yellow thing in the cabinet over there?’

‘It’s a Swan-Ganz catheter. That too was a really good idea to start off with. It provided the most accurate measurements of cardiac output then available. It was invasive and high-tech, certainly, but I suppose that was part of the appeal.’

‘So what was wrong with it?’

‘It was a piece of plastic that rattled around the rhythm-generating parts of the heart that could perforate the delicate walls of the blood vessels nearby, and which worked in part by obstructing the blood flow to portions of the lung, i.e. a pulmonary infarct. The bottom line was that it killed more than it cured.’

‘I see.’

A dimly lit passageway led off the main room of the Museum of Curiosities. There were no items to be seen in the passageway itself, but the walls were lined with posters that had boxes, arrows and writing all over them. At the end, was a low pedestal on which sat what looked like a dark brown item of pottery.

‘What’s that?’ I asked Dr Marks.

‘The Avenue of Algorithms. They all seemed a brilliant idea about 25 to 30 years ago, but then we realised that in an emergency situation, they were about as useful as a chocolate teapot.’

‘And the thing on the pedestal at the end of the passageway?’

‘That’s actually a chocolate teapot.’

We emerged from the Avenue of Algorithms and turned right towards what seemed to be the centrepiece of the exhibition. A cabinet sat in a pool of light covered with a dark cloth.

‘What’s that?’

‘We reserve this space for the latest addition to the Museum of Curiosities. Fellows vote every year for the piece of equipment, drug or technique that has proved to be more dangerous than therapeutic. We unveil the item in an annual ceremony that is attracting increasing attention. Princess Charlotte is due to unveil it tomorrow.’

‘Can I have a look at it now?’

‘Only if you promise not to tell anyone until it is officially unveiled.’

‘Of course!’

Dr Marks took a corner of the cloth and pulled sharply at it; it slipped noiselessly to the floor. In an ornate, gilded frame was a piece of white paper that bore only three words: ‘Goal Directed Therapy.’

Monty awoke with a start, his heart pounding and his breathing heavy, sweat running down his face and neck and onto his striped pyjama top. It had been a dream – just a dream.
Intraoperative Hypotension in Elder Patients (iHypE): a RAFT study

Sam Clark, Senior Echo Fellow, Oxford University Foundation Hospitals NHS Trust, Oxford, UK; Chair of RAFT and Co-Chair of the Oxford Critical Care and Anaesthetics Research Enterprise (OxCASCADE)

Alex Wickham, ST6, Imperial College Healthcare NHS Trust, London; Trainee lead for iHYPE and Member of RAFT and PLAN

Background
In recent years, anaesthesia has endeavoured to be at the forefront of collaborative research. Trainees have been no exception to this through the development of Trainee Research Networks (TRNs), and involvement in projects such as SNAP-I. The Research and Audit Federation of Trainees (RAFT), an umbrella national organisation comprised of the regional TRNs, was formed both to facilitate co-operation and perform its own collaborative studies. After the success of RAFT’s first proof of concept project, COMS (www.rafttrainees.com), RAFT is on the verge of conducting iHYPE – a multicentre observational study of the incidence, severity and treatment thresholds of intraoperative hypotension in patients aged over 65 years in the UK.

The problem
Intraoperative hypotension (IOH) occurs commonly during anaesthesia. Unfortunately, IOH is associated with adverse outcomes in the elderly. Based on this, the AAGBI has recommended that IOH be avoided in older patients, though there is considerable debate about what defines IOH. More recently, the Pan-London Perioperative Audit and Research Network (PLAN) conducted a study that demonstrated hypotension in 89% of older patients, across all surgical specialities. This was the catalyst for iHYPE and was adopted as RAFT’s first fully national project in 2015. Since then, iHYPE, which was received support and funding from the National Institute for Academic Anaesthesia and was adopted on to the National Institute for Health Research (NIHR) portfolio.

The plan
iHypE is a national snapshot observational study in patients aged ≥65 years having surgery under general or regional anaesthesia. Its primary aim is to describe the prevalence, magnitude and duration of documented IOH in this population. Secondary aims are to determine routinely applied treatment thresholds, both clinically applied and stated, and to highlight outcomes associated with IOH.

Anonymised data will be collected from anaesthetic records whilst anaesthetists will be surveyed to identify routinely applied blood pressure treatment thresholds. Importantly, clinician details will not be recorded nor will individual clinician responses be linked to patient data. Selected in-hospital outcomes will be collected at 30 days after surgery.

Timeline
Data collection is planned to take place over two locally determined weekdays between November and December 2016. The project is trainee led and delivered but with consultant support. All collaborators involved will receive a certificate and be named in any resulting publications. Trainees will be able to gain valuable research experience towards their CCT. For further information please contact your local TRN, visit www.i-hype.org or email info@i-hype.org.

References
Trainees and the RCoA: the next 25 years

JP Lomas, Deputy Chair, RCoA Trainee Committee

I sat in the holding pen with the other candidates. Everyone sported the same incongruous look: sharply dressed with a veil of fear. I made nervous conversation with the candidate sat next to me: ‘first time?’

She replied that it was her second attempt. An initial sitting of the Primary FRCA SOE had gone wrong right from the beginning. The candidate had taken her plastic cup of water into the examination room to provide lingual lubrication but, on being asked a tricky opening question, she had sipped instead from the examiner’s receptacle.

‘That’s my water,’ the examiner told her. She swore loudly and crassly as a reflex response; the lid lifted on a simmering pot of tension, stress and nerves. ‘So, you’ve sworn at me and drunk my water: anything else you’d like to get out of the way before we start the exam?’

‘There was no way back from that point’, she told me.

If trainees were to speak of their College, it would usually be with reference to the FRCA examination. The examinations are undoubtedly ‘core business’ for the College and, considering that the FRCA continues to be held in high regard by both Fellows and non-Fellows, a successful one that has stood the test of time. However, the sad truth is that few trainees go beyond the first two floors of the College building in Red Lion Square in which the examinations are conducted, and they have a limited connection with the body that represents them to the General Medical Council (GMC), Government and other external bodies.

It is an important time for the profession. The challenge of maintaining standards in anaesthesia while the walls of the NHS are crumbling is only going to get worse. The last College census revealed the scale of gaps in the trainee, consultant and SAS grade workforce, and both changes to pension arrangements and the potential for an adverse new consultant contract could see numbers dwindle further. How can we meet the expectations of an ageing population with a contracting workforce when medical advances make surgical interventions safer for patients with increasing levels of co-morbidities? It will be our generation who finds out.

The challenge for the RCoA to meet over the next 25 years is one of sustainability: of the institution and of the profession. The trainees of today are the trainers, examiners and College officers of tomorrow, and will provide the next 25 years of anaesthesia to UK patients. Trainees are stakeholders of the present and the future, and need a visible presence and a loud voice outside the examination booths. The College wants and needs to embed trainees in all it does, and to be responsive to their needs and expectations, now and in the future.

Over the course of the next year of 25th Anniversary celebrations, there will be opportunities for trainees to help the College evolve to meet the needs of a new generation of anaesthetists. President Liam Brennan will be coming to a city near you to listen. Please get involved and let him know what you think the College should and could be doing. On Diplomates Day in 2017, there will be tours of the building in Red Lion Square. We hope you’ll see that there’s more to the College than the exams and the first two floors.

‘Delighted to know that your members have been watching our patients sleep for 25 years. Congratulations from the Royal College of Physicians and Surgeons of Glasgow’
Academia in 2042: what will research in anaesthesia look like?

Ramani Moonesinghe, Consultant in Anaesthesia and Critical Care, University College Hospital; Director, NIAA Health Services Research Centre.

Mike Grocott, Professor of Anaesthesia and Critical Care, Southampton University; RCoA Council Member.

Ed Pennington-Ridge, Director, Bloomsbury Innovation Group [www.bloomsburyinnovation.com]

The differences in research topics, methods and processes between 2042 and today will be much more substantial than the contrast between today and 1992 when the RCoA was born. The dominant distinctions are likely to be due more to broader societal changes than to factors within the microcosm that is research in anaesthesia and perioperative care. Perhaps the most striking change between 1992 and 2017 relates to how we work. The ubiquity of mobile communications, email, the personal computer and readily available research software have transformed the ease with which research can be conducted and communicated, and our capacity to acquire, collate and analyse so called ‘Big Data’. Increasingly rapid technological (r)evolution will continue to transform the nature of the research endeavour, along with new developments that we may not yet be able to conceive. Science fiction in 2017 is likely, in many cases, to be science fact in 2042. Over the next couple of pages, we take you on a magical mystery tour of what might be in 2042 – some of these predictions may well turn out to be wrong, but let’s begin the discussion and see what you think.

Research topics
The major change in perioperative healthcare from both surgical and anaesthesia perspectives will be the automation of its delivery: a huge amount of technological and engineering research effort will go into making these processes safe and reliable. Provision of the pharmacological aspects of anaesthesia and perioperative care will be entirely assumed by machines (closed-loop anaesthetic machines already exist and have been proven to be better than humans at controlling anaesthesia within pre-programmed levels).1 Furthermore, the pharmacological induction and maintenance of anaesthesia may be entirely superseded – manipulation of the brain’s electrical activity through focused external devices will allow control of consciousness without physiological disturbance. The inflammatory and autonomic response to surgery will be better understood. Much work will go into understanding inter-individual differences in the response to tissue trauma and into predicting the response to surgery – the type of surgery will be chosen based on the predicted response of the subject. Human organ transplantation may be entirely replaced by stem-cell based personalised replacements, which will rapidly make the concept of tissue donation seem antiquated. Near-patient rapid diagnostics will be normal, including for genetic and epigenetic profiles. The interim (2042) result of this evolution of anaesthesia and perioperative healthcare is that our research will become increasingly focused on the interactions between the patient, the disease and the therapy, and on developing strategies for mitigating harmful interactions.

Research methodology
Let’s look across the entire research pathway. Basic science research will be transformed by progress in stem-cell technology, computer modelling and simulation, which will ultimately replace the need for animal-based research. It will be possible to clone human body parts and precisely mimic
the interactions between organ systems in order to simulate the responses to novel interventions. What is currently considered to be translational research (crossing the boundary between laboratory and bedside) will therefore be accelerated, since common barriers such as ethics approvals and the need for subject recruitment for ‘first-in-man’ studies will become superfluous as the risks involved in such research for volunteers or patients will significantly fall. Randomised controlled trials (RCTs) of therapeutic interventions will have evolved into (or perhaps have been replaced by) personalised medicine experiments (already becoming known as ‘n-of-1’ studies), which will enable the treatment to be matched to the patient’s epigenetic profile. Epidemiology will be revolutionised by ‘Big Data’ – any diseases or conditions for which sufficient data exist will benefit from the routine use of machine learning, thus accelerating the ability to make predictions and find solutions by several orders of magnitude. Whole themes of health services and patient safety research will simply disappear, as humans and their limitations are removed from the delivery of healthcare.

The research process

Next, let’s think about the process through which clinical researchers might currently go to answer a research question. Using the perennial example of perioperative haemodynamic optimisation, the process looks something like the flow chart (opposite). Costs the taxpayer, industry or medical charities hundreds of thousands of pounds, and occupies large groups of clinical and academic staff for months or years. Starting with the systematic review back in 1992, this required repeated trips to the library, phone calls, faxes and ‘snail mail’ letters (how quaint!) and despite all this effort, might have captured 10–20% of the data available, and taken months if not years to complete. In 2017, the same review might capture 80% and take a few weeks. In 2042, the data will appear before you have thought to look for it – spread automatically across the integrated medical network, building itself into practice, and with no human involvement at all.

When it comes to conducting the novel research itself, there will be no need for what we understand to be the RCT [at least in its current format]. In routine practice, a computer will automatically calculate the correct haemodynamic management for the individual patient. This management will not be constrained by predetermined formulations of compound sodium lactate or dextrose saline solutions, or haemodynamic monitors that rely on surrogates or imperfect calibrations. Continuous closed-loop monitoring of patient physiology via a single-use ‘lab on chip’ device will enable bespoke replacement of fluid and electrolytes, and accurate, targeted manipulation of oxygen delivery. Now if you think that we have strayed into our Guest Editor’s territory, and are presenting a view about the future of anaesthesia rather than the future of anaesthesia research, then you are only partly right. Because the future of anaesthesia research will not revolve around discrete projects, we will not have to draw conclusions about one patient’s likely response to an intervention based on data from other, historical patients that were enrolled into a clinical trial, and with whom they share a few, possibly irrelevant, phenotypic characteristics. Much of the future of both anaesthesia delivery and anaesthesia research will be based on ‘closed loops’ and machine learning. In order for the computer to learn what is ‘best’ for the patient, sufficient data have to be captured for it to be able to make predictions. However, crucially, the answer will not be ‘10 mls per kilo’
or ‘MAP>65’. It will be whatever is necessary for that individual patient to have the best possible outcome, and the only limit to understanding this will relate to how many different parameters we can measure and the accuracy of those measurements. For example, might it be plausible that mitochondrial activity in left ventricular myocytes is critical to postoperative outcome and, if so, how quickly can we prove this and develop an accurate tool to measure it directly and in real time? This may well be the research of the next 25 years – and this will then feed the machine, for whom the learning methodology is already nearly there.

Disrupting research infrastructure: the unlimited power of the individual

Currently, research is coordinated by universities or healthcare organisations. While we are all encouraged to participate in research, it remains the case that research funding usually diverts to particular organisations or individuals who can access the infrastructure and support required to assure grant-giving bodies that their work will be rigorous, achievable and safe. The distributed ownership of data will change all of this. In the same way that computer hackers can already send the world’s most powerful organisations into a flat spin from a cybercafé or their own living room, in 2042, with open access to patient data, any programmer with an interest in healthcare will be able to run and publish their own studies, immediately making them available for the benefit of humankind.

This then begs the question – what will become of universities? In today’s world, universities are seats of kudos, learning, research and innovation. With regard to learning, online courses are already gaining popularity because they enable the student to undertake the courses run by the best universities in the world at the student’s convenience from any part of the globe. ‘Hang on!’ we hear you cry, what of the vital camaraderie and bonhomie which many of us enjoyed as undergraduates – surely this is a critical part of university education which cannot be replicated unless we are living within the pressure cookers of these prestigious institutions? Think again! One’s ability to ‘experience’ will no longer be bound by physical, spatial or temporal constraints. Augmented reality will be an integral part of most people’s lives. It is likely that Oculus Rift (www.oculus.com) will look as outdated in 2042 as Pong, the cutting edge of 1970s virtual reality, does today (those of you born after 1980, please see www.ponggame.org). So, if there is no need for physical space to learn, investigate or innovate, because we can do all this from the comfort of our own space, what use is there for the ivory towers and gleaming spires? Beautiful (virtual?) museum space, no doubt. Furthermore, what of traditional academic hierarchies? No longer will there be a need for professional researchers to compete for funding in order to survive, as the costs of doing research and maintaining these hallowed institutions will dramatically fall. One can dream about a time coming soon when internet-enabled social mobility has progressed enough to ensure that ability rather than access enables those minds with the best potential from any cultural, geographical and socioeconomic background to contribute to the techno-philosophical zeitgeist. To that end, the key role for human academics may in future be to work with technology to mediate, moderate and manage the array of information at our fingertips and, perhaps more importantly (and in full circle back to our forefathers in ancient Greece and Italy), to draw sharper focus on the existential debate concerning the direction in which all this progress is taking us.

How will we get there?

As with much innovation, the biggest barrier to progress is the comfortable fug of our present reality, and perhaps
justifiable suspicion of motives, when large corporate agencies are leading the way. Sensationalist stories fan the flames, and the end result is a loss of faith and support. The article we have referenced here has an alarming headline, but the narrative is a balanced report that encourages transparency and openness about how our health and healthcare information is used. However, the joke is that our data are already being used without our explicit consent, mostly in ways which irritate or unnerve: how exactly does Google know what boat shoes I wear and why does it want me to purchase another pair? The role of researchers now must therefore be to promote transparency and advocate public support for open data sharing. Once the public see realised benefits in health and healthcare, and understand that their donor data has at least as much value to society as their posthumously donated organs, then hopefully we will be pushing against an open door.

2042–2067

If what we have written so far has bent your mind, then try thinking about what will happen in the 25 years following 2042 – when today’s school children will be advanced in their careers. Is it possible (or even likely) that by then, traditional ‘surgery’ will no longer exist, with the surgeon’s knife having been replaced by nanobots treating disease with subcellular precision? On a darker note, in a world in which a virtual representation of perfect health becomes the most accessible route to the experience of perfect health, perhaps computer viruses will pose a greater risk to the population than bioviral infections do today. We are sure that many of you will think that the future we have described above is fanciful or folly – and we are of course quite prepared to be proven wrong – but also consider that if we can imagine something, then it is very likely to happen, even if the timeframe is uncertain. So, the only question remaining is… what is currently unimaginable?

References


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Podcast producer for the national Perioperative Quality Improvement Programme (PQIP)

We would like to invite applications from people interested in audio technology to join our exciting UK wide Perioperative Quality Improvement Project. PQIP is a new joint initiative between the Royal College of Anaesthetists, NIAA Health Services Research Centre, and the Health Foundation (www.pqip.org.uk).

PQIP will launch later this year, and this role will form an important part of our media strategy. The successful applicant will be responsible for producing one 15–30 minute podcast per month initially, based around topics related to perioperative medicine, data and statistics, QI and improvement science. Support will be provided for identifying topics and speakers but we would be keen for the successful applicant to bring their own ideas to the team. We are hoping to create engaging and modern media output so we are open to candidates’ artistic styles.

In addition, the role will involve the opportunity to become a part of the PQIP project team, attend monthly PQIP meetings in London (in person or by teleconference), and the potential to expand into other media. The role will not attract any funding but the PQIP team will provide any necessary hardware/software and pay travel expenses required for recording the podcasts or attending meetings. Good communication and presentation skills will be required as the successful candidate will host/present the podcasts as well as edit and produce them.

If you are interested, please send a two-page CV and a covering letter which describes why you are interested in the role and why you would be suited to it to pqip@rcoa.ac.uk.

Deadline for applications: 9.00 am on Monday, 14 November 2016
Interviews: Morning of Wednesday, 7 December 2016
Twenty-five years on: a former President returns

Sebastian Parrott*

Liam stepped out of Holborn Underground Station into the bright sunshine of a May morning on Southampton Row.

He was immediately struck by two things: the quietness of the roads now that internal combustion engines had been banned inside the M25, and a small boy on an electric skateboard. Picking himself up off the pavement, he groaned in the weary way that only the elderly can as his arthritic knees pointed out to him in no uncertain terms that he was fast approaching his 80th birthday. He walked slowly and painfully along High Holborn and turned left towards Red Lion Square along Procter Street. He had not been here for years. He had visited the College quite frequently in the months after he stood down as President almost 25 years ago, but in recent years his visits had tailed off as he devoted more and more time to his grandchildren and a quiet retirement in rural East Anglia. He was not quite sure what to expect. He knew there had been some building developments but he had not exactly kept up with the latest College news since the Bulletin had gone online only. Computers were all very well, he thought, but nothing beats a piece of paper that you can hold in your hand.

He walked past the statue of Lord Brockway on the west side of the square and peered round the trees, expecting to meet by the familiar sight of the seven-storey, soulless, monochrome, white building that had dominated the north-western corner of the square when he was in his prime. He stopped in his tracks and looked ever upward in astonishment. It had not grown a bit – it had grown a lot. In place of the old building, which to him had always looked like an office block built in Lego by a 10-year-old, there was a huge, shining, metal and glass tower at least 20 storeys high. He could not believe it. Metre-high, gold lettering above the main entrance declared that the building was called ‘New Churchill House’. He walked up the short flights of steps to the glass doors, which parted noiselessly to allow him to enter the reception area.

‘Good morning, Dr Brennan’, said a familiar face behind the reception desk, ‘welcome back – we haven’t seen you for a while. If you sit yourself down there, one of the facilities staff will be down in a minute to take you up to the Past Presidents’ and Deans’ Lunch’.

Liam sat down and looked at a huge board that listed the organisations housed in New Churchill House. At the top, and in the largest font, it read ‘Royal College of Perioperative Medicine’. Underneath, and in far smaller font, were what he presumed were the constituent faculties of the newly formed College:

- The Faculty of Intensive Care.
- The Faculty of Pain Medicine.
- The Faculty of Surgery (formerly the Royal College of Surgeons of England).
- The Faculty of Anaesthesia.

Liam awoke with a start, his heart pounding and his breathing heavy, sweat running down his face and neck and onto his striped pyjama top. Another dream! The same one he had had every night for months. What did it mean? Had he been right to persuade College Council to fund the perioperative medicine programme? Had things gone too far already to stop its inevitable progress towards total domination of every surgical pathway in every NHS hospital?

He looked at his watch – half past five in the morning. There would be no more sleep for him tonight. He swung his legs over the side of the bed, feeling a slight ache in the knees that reminded him of something.

But he could not quite remember what.

*Full name, grade and affiliation supplied and available from bulletin@rcoa.ac.uk
Join our 25th Anniversary celebrations

Sharon Drake, RCoA Deputy Chief Executive

The College celebrates 25 years as a Royal College in 2017. A milestone for any organisation, our 25th Anniversary is made all the more significant given our growth in stature in those years and the influence that anaesthesia, as the largest single secondary care specialty, has on patient experience and outcome.

As part of the celebrations, we are planning a year-long programme of events and activities that will celebrate the achievements of the College, its history and role in the development of the specialty, and our vision for the specialty for the next 25 years.

Sharing the moment

There is no shortage of significant anniversaries in the medical world, and we are in good company in 2017. The Medical Women’s Federation has its centenary, the British Pain Society celebrates 50 years, and the Australian and New Zealand College also join us in celebrating its 25th Anniversary. Much closer to home, the Faculty of Pain Medicine will be ten years old. Our plans include some joint celebrations to highlight the important links between our organisations throughout 2017.

Our programme officially starts at the AAGBI’s Winter Scientific Meeting (WSM) in London on 12 January 2017 with a joint session entitled ‘Looking back to going forward: the history and future of our specialty,’ with presentations from our President, Dr Liam Brennan, and Dr David Wilkinson. Our Anniversary Meeting on 8 and 9 March 2017 will cover significant landmarks in anaesthesia, with an excellent programme of speakers and topics. We will also be running flagship events in Northern Ireland, Scotland and Wales (for details see page 83).

RCoA in the regions

Naturally, we want to involve as many Fellows and Members as possible in our programme, and we recently competitively selected ten regional 25th Anniversary events for a bursary. The events were selected on the basis of diversity of topics and audience, excellent regional coverage across the UK, and a spread of dates throughout the year. Page 65 provides an overview of the regional events taking place throughout 2017. RCoA Council Members and staff will be in attendance at the events to provide individual support and information, and we look forward to seeing as many of you as possible.

As a means of recognising the huge amount of work and support for training in anaesthesia, we want to highlight publicly the work of our local trainers, many of whom are the unsung heroes in our regions. Anaesthesia Trainee Representative Group (ATRG) members, in conjunction with their local colleagues, can nominate up to three trainers in their school who, in the trainee’s opinion, measure highly against a GMC checklist of qualities that describe excellence in training, providing a supporting written citation with their nomination. The College’s 25th Anniversary Committee will consider applications, and the recipients will be announced in early 2017. We plan to present the awards at regional events. For further details, please see: http://bit.ly/2cPEuIb.

Our Anaesthesia, Research, Innovation, Education, Science (ARIES) Talks will feature a wide range of high-profile speakers delivering short, informative and entertaining talks that will be released online every month. Our ARIES speakers have been specially selected as experts in their field who are passionate about their work and have

1992–2017
a great idea, new concept or argument that they want to share. The talks will be available on our YouTube channel [http://bit.ly/1rcoaYouTube] and will also be accessible to the public.

Public engagement
Throughout the year, we are planning to showcase the work of our doctors and of the specialty. For example, Professor Mike Grocott will talk about his work in taking medicine ‘from mountainside to bedside’ at a public science event at the Museum of London, while our guest editor, Dr William Harrop-Griffiths, will deliver a lecture on the history of local anaesthesia.

‘Inspiring the Future’ is a service that makes it easy for doctors to volunteer to talk to schools and colleges. It uses a secure online platform to link volunteer doctors with state schools and colleges across the UK. Volunteers are required to pledge one hour once a year in a school or college near their home or place of work. By linking up with ‘Inspiring the Future’, we hope to maximise the opportunities for anaesthetists to go into schools to talk about medicine, and specifically anaesthesia, as a career choice. To assist our members and fellows, we are developing a supporting pack that will include a ready-made ‘horrible history’ lecture for the younger audience that describes how anaesthesia has advanced through the years, and a portable box of kit and equipment to enable some interactive sessions. Details on how to take part are on the RCoA’s 25th Anniversary microsite at: http://bit.ly/2cPD54N.

Our specialty in pictures
For the budding photographer, and in collaboration with the Royal Photographic Society, we are running a photography competition in 2017 as part of our celebrations. The competition will be open to RCoA Fellows and Members, and aims to capture a photographic record of anaesthesia, pain medicine and critical care in 2017. There will also be an opportunity for the public to vote for their preferred image from the shortlisted entries. By capturing our specialty in pictures, we hope to raise awareness of the work of anaesthetists, and will display the winning images at the College and at future regional events.

A classic murder mystery
One of the exciting things we have been planning is the potential screening of ‘Green for Danger’ at the Barbican, London, with an introduction from Dr Tom Clutton-Brock. In August 1944, during the air-aids on London, a murder is committed in a district hospital. A patient dies on the operating table after being injured by a flying bomb. The anaesthetist, Barney Barnes, has had a patient die in similar circumstances previously. Were their deaths accidental?

What’s in a number?
By now, you should be familiar with the new College branding and, as this issue illustrates, we have created a 25th Anniversary logo, which we will use to promote our programme of events and activities.

The number 25 itself has inspired some creative suggestions in-house, and throughout the year we will use the number to generate interest in anaesthesia for patients and the public, as well as for our Members and Fellows. These suggestions have been put forward as possible themes:

■ A trainee who enters medical school at 18 will qualify as a doctor at 23 then, following two years’ Foundation training, would start their anaesthetic training aged 25.
■ A focus on 25 members who first passed their FRCA.
■ 25 reasons to become an anaesthetist.

■ What will anaesthesia look like in 25 years’ time?
This is the subject of our essay prize for medical students and trainees which is advertised on page 66.
■ 25 anaesthetic advances over the last 25 years.
■ 25 objects in anaesthesia.
■ The average time for anaesthetic drugs to travel up the arm to the brain is around 25 seconds.

A lasting legacy
While it is important to look back and celebrate our achievements, it is as important to leave a legacy for the future. Our 25th Anniversary goals of reducing pain after surgery and improving patient outcomes, as described in Dr William Harrop-Griffiths’ editorial, will feature throughout our events and activities, and we will be working closely with the Communications team to promote our work in these areas and measure the impact post-2017.

I hope that you will all have the opportunity to get involved in our celebrations through attending a regional event, watching an online talk or reading some of the essays on what anaesthesia will look like in 25 years’ time. Driverless cars used to be confined to the realm of science fiction, so it will be fun to imagine what the next 25 years will have to offer for our specialty.

We will continue to use the website, President’s Newsletter and social media to update you and let you know how you can get involved. Please do get in touch at rcoa25@rcoa.ac.uk if you have any new suggestions on how we can celebrate this special year, particularly in relation to promoting the work of anaesthetists and increasing the understanding of anaesthesia among the general public.
## Anniversary programme of events

During the anniversary year we will be running a programme of events and activities to celebrate our achievements, promote our specialty and engage people across the country in the art and science of anaesthesia.

In addition to our regular events programme, we will be running a number of public and patient engagement events, with a presence at school science meetings and careers fairs, and support for locally run events across the country.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>19 January 2017</td>
<td>Oxford Deanery Anaesthetic Trainees [OXDAT]: RCoA Anniversary Meeting</td>
<td>John Radcliffe Hospital, Oxford</td>
<td>TBC</td>
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<td>24 January 2017</td>
<td>An introduction to Improvement Science</td>
<td>Education Centre, Royal Victoria Infirmary, Newcastle upon Tyne</td>
<td>Free of charge to NSAICM registered trainees and £30 for other delegates</td>
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<td>8–9 March 2017</td>
<td>RCoA Anniversary Meeting: Landmarks in UK Anaesthesia</td>
<td>The Mermaid, London</td>
<td>£395 (£295 for RCoA registered trainees)</td>
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<td>16 March 2017</td>
<td>Manchester and Liverpool Medical Society’s: RCoA Anniversary Anaesthetic Meeting</td>
<td>Park Royal Hotel, Stretton</td>
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<td>17 March 2017</td>
<td>RCoA Career Day</td>
<td>RCoA, London</td>
<td>Free</td>
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<td>21 March 2017</td>
<td>Xtreme Everest: taking medicine from mountainside to bedside – Professor Mike Grocott</td>
<td>Museum of London, London</td>
<td>Free</td>
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<td>30 March 2017</td>
<td>Joint RCoA and Royal Society of Medicine Meeting – Anaesthesia and Surgery: the interface</td>
<td>RSM, London</td>
<td>TBC</td>
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<tr>
<td>26 April 2017</td>
<td>Schools Science Conference – Science for transformation</td>
<td>University of Westminster, London</td>
<td>Free</td>
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<tr>
<td>17 May 2017</td>
<td>London Anaesthesia Anniversary Conference</td>
<td>London, Venue TBC</td>
<td>TBC</td>
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<tr>
<td>25 May 2017</td>
<td>The Mushin Museum 1947–2017: Anaesthesia past and present in Wales</td>
<td>University Hospital Wales, Cardiff</td>
<td>Free</td>
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<td>10 June 2017</td>
<td>Dr Gray’s International Airway Day, Elgin</td>
<td>Alexander Graham Bell Centre of the University of the Highlands and Islands, Moray</td>
<td>TBC</td>
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<tr>
<td>13–14 June 2017</td>
<td>RCoA Summer Symposium</td>
<td>The Waterfront Hall, Belfast</td>
<td>£395 (£295 for RCoA registered trainees)</td>
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<tr>
<td>June 2017</td>
<td>ARIES Talks</td>
<td>RCoA, London</td>
<td>Free</td>
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<tr>
<td>July 2017</td>
<td>ARIES Talks</td>
<td>RCoA, London</td>
<td>Free</td>
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<td>16–18 August 2017</td>
<td>Edinburgh Anaesthesia Festival</td>
<td>Edinburgh International Conference Centre</td>
<td>TBC</td>
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<tr>
<td>September 2017</td>
<td>The RCoA Silver Jubilee Social Media and 3rd #FOAMed Film Festival (@FOAMfilmfest)</td>
<td>Nottingham, Venue TBC</td>
<td>TBC</td>
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Awards

We have a number of awards and competitions that have been specifically developed for our 25th Anniversary. The awards and competitions, including how to apply, are detailed below:

Medical Student Essay Prize

Medical students are invited to submit a paper on the title: ‘What will anaesthesia look like in the next 25 years?’

The essay should be no longer than 2,000 words and there is a prize of £500 for 1st prize and £250 for the runner-up.

How to apply
Submit your paper by email, along with a copy of your CV and a covering letter, by 9.00 am on 3 April 2017. Please note, only one paper may be submitted per applicant.

Applications should be submitted to rcoa25@rcoa.ac.uk, and the declaration signed and submitted at the same time (declaration available via http://bit.ly/2cPEuH).

Trainee Essay Prize

Trainees are invited to submit a paper on ‘Anaesthetic training in 2042 – a day in the life of an anaesthesia trainee’.

The essay should be no longer than 2,000 words and there is a prize of £500 for 1st prize and £250 for the runner-up.

How to apply
Submit your paper by email, along with a copy of your CV and a covering letter, by 9.00 am on 3 April 2017. Please note, only one paper may be submitted per applicant.

Applications should be submitted to rcoa25@rcoa.ac.uk, and the declaration signed and submitted at the same time (declaration available via http://bit.ly/2cPEuH).

Trainer Award

A new award is being launched for the 25th Anniversary year to celebrate excellent training in anaesthesia, critical care and pain medicine. Anaesthesia Trainee Representative Group (ATRG) members, in consultation with local trainees, are invited to nominate up to three local trainers for an award.

Does your trainer:

- Have a willingness and ability to share skills, knowledge and expertise?
- Have an enthusiastic and positive attitude?
- Promote lifelong learning in trainees and others?
- Provide constructive feedback and guidance?
- Motivate all around them by setting a good example?
Listen to and value the opinions of trainees?

Have respect from colleagues and others throughout the organisation?

How to nominate
To nominate your trainer visit http://bit.ly/2cPEuIH to download the criteria and application form. The following information will be required as part of the application:

- School of Anaesthesia.
- ATRG representative details.
- Nominee name.
- Nominee hospital.
- Nominee GMC number.
- Citation (500 words).
- Supporting trainee details: Name, email address and College reference number.

Nominations should be sent to rcoa25@rcoa.ac.uk no later than 9.00 am on 28 November 2016.

Photographic competition
In collaboration with the Royal Photographic Society, we will be launching a photographic competition capturing anaesthesia, critical care and pain medicine in 2017. Full details, including how to enter, will be available at www.rcoa.ac.uk/rcoa25 shortly. Submissions will be accepted during 2017 and published at an RCoA event. Terms and conditions apply.

Get Involved
We are working in collaboration with Inspiring the Future to make it easy for anaesthetists to volunteer in schools and colleges. By pledging one hour a year in a school/college you can educate students and raise awareness about our specialty.

If you would like to get involved in the 25th Anniversary programme visit www.rcoa.ac.uk/rcoa25 or contact Nicola Wood on rcoa25@rcoa.ac.uk to find out about events in your region.
An update on the Safe Anaesthesia Liaison Group

Jaideep J Pandit, Consultant Anaesthetist, Oxford University Hospitals; Professor and Fellow, St John’s College, Oxford; Chair, Safe Anaesthesia Liaison Group

Kathleen Ferguson, Consultant Anaesthetist, Aberdeen Royal Infirmary; Honorary Treasurer, Association of Anaesthetists of Great Britain and Ireland; Member, Safe Anaesthesia Liaison Group

The Safe Anaesthesia Liaison Group (SALG) is a committee of RCoA, but also a partnership between RCoA, the Association of Anaesthetists of Great Britain and Ireland, the Faculty of Intensive Care Medicine, and NHS Improvement, that brings together the interests of a number of different organisations across the UK, with members being nominated by the organisations that they represent.

Other than the main partners, the core group includes bodies such as the NHS Litigation Authority, the Medicines and Healthcare Products Regulation Agency, the Department of Health and Social Security [Wales], NHS Scotland, Health and Social Care Northern Ireland, NHS Clinical Risk Management, and the Lancaster Patient Safety Unit, along with lay representation. An advisory group includes specialist societies and representation from other professional groups such as nurses and ODPs.

Broadly SALG has two functions, one reactive and the other proactive. Reactively, SALG reviews anaesthesia-specific incidents reported to the National Reporting and Learning System (NRLS – covering England and Wales), and other UK national healthcare safety bodies, and thereby supports the expansion of specialty-specific incident reporting. The Anaesthetic e-form (www.eforms.nrls.nhs.uk/asbreport) has been developed as a specialty-specific reporting form to promote reporting and national learning in anaesthesia. Incidents reported using the e-form are submitted to the NRLS and also inform reporting to Local Risk Management Systems. These reviews are in the main used to generate the regular Patient Safety Updates as important reminders and sources of learning about safe practice (http://bit.ly/2cPD2WW for the early-2016 Update).

Another reactive role is the provision of responses to specific queries raised by our member/partner organisations or received from the wider anaesthetic community, or (more rarely) by patients. SALG also provides advice to NHS Improvement over specific safety issues, which in some cases inform the publication of Patient Safety Alerts. In this way, SALG provides a central reference point for calls and enquiries from healthcare professionals, the media and patients through the RCoA Patient Safety Administrator (salg@rcoa.ac.uk). Working parties can be convened to address specific safety issues in detail, and to produce reports and tools for wider dissemination to assist in establishing action, training and education needs. One recent example is the statement in some manufacturers’ product literature which appears to indicate that it is unsafe to drive for several days after isoflurane anaesthesia (almost all departments would advise against driving for 24 or 48 hours after day surgery – the limit dependent on the surgery as well as the anaesthetic).

Clearly this raises all sorts of legal, ethical and practical issues which SALG is well placed to help resolve.

This overview of safety issues provides SALG with a unique insight into trends and patterns, leading to the development of a proactive role in supporting or commissioning investigations through research or audit. Perhaps these roles have in the past been secondary given the huge workload presented by the need to respond to safety reports, but SALG has now resolved to prioritise the proactive part of its mission. Drivers for this can come from several sources; specialist societies, groups or individuals might approach SALG with an idea for support or further investigation, and the outputs might lead to (amongst other things) formal SALG publications. Indeed, although they are not academic ‘journal publications’, SALG has already delivered outputs such as the dental trauma guidance and the Morbidity & Mortality Toolkit (at http://bit.ly/2cPCIHz).

One recent output is the ‘SALG Safety Project of the Month’ (see: http://bit.ly/2cPBQCM). Whilst published by SALG, we are not involved in the creation or development process, and so they are not formally endorsed.
However, projects submitted do receive some peer review by SALG [and not all submissions are accepted], with our feedback asking for improvement or more data. SALG is very keen to support local safety projects, and hopes that this initiative will help share ideas and promote discussion. Many of these initiatives are first presented at the annual Patient Safety Conference, a meeting that includes several high-profile speakers [please see our website for further information: http://bit.ly/salgPS].

Examples of more formal adoption by SALG would be fire safety in intensive care units and theatres (led by Drs Kelly and Hardy in Bath) or the ‘Stop Before You Block’ campaign (in partnership with Regional Anaesthesia UK and Nottingham Hospitals; see: http://bit.ly/2cPCIHz for SALG publications). This last campaign may soon be coupled with a ‘Mock Before You Block’ initiative!

Alternatively, SALG might offer support for projects seeking funding or formal institutional backing, an example being support for a project on the effects of noise in critical care units2 [the authors were successful in their funding bids with the Wellcome Trust and National Institute of Health Research]. Finally, SALG is now in a position to commission research, audits or other workstreams itself, if it identifies a need through its own review of safety incidents. SALG is supporting a review of throat-pack incidents, an educational review of one-way intravenous valve systems, and at organisational level has worked with the AAGBI to institute a working party on implementing the recommendations of NAP5.3 One important question integral to this development by SALG, hitherto addressed only in limited ways,4,5 will be how best to determine that a proposed safety intervention is in fact potentially effective [the rarity of adverse events limiting the utility of randomised trials in answering this].

SALG also hosts two networks of over 800 individuals in total, who have volunteered to act as a point of contact between their colleagues and SALG. These are a Safety Network, with a database of about 680 anaesthetists, and a Risk Management Forum comprising about 180 administrative risk-management and patient-safety staff. The networks are a means of disseminating information and feedback on all safety aspects arising from the wider anaesthesia care pathway. However, these forums are currently informal [readers are encouraged to join simply by emailing salg@rcoa.ac.uk] and discussions revolve around how better to use this resource to improve patient safety [acknowledging that similar networks already exist – Quality and Audit Co-ordinators, QuARCs, and DAS-RCoA Airway Leads]. Care will be needed to ensure that remits do not overlap, and that communication channels are robust.

Conclusions

It is clear that SALG is an extremely busy committee of the RCoA, and one which it is a privilege to be a part of [and, for JJP, Chair]. Ably supported by excellent staff, it is in the process of widening its mission from being simply reactive to being more proactive. To this end, we have recognised that closer working between two of the partner organisations [RCoA and AAGBI] is essential, so that a common ‘face of safety’ can be presented by the profession to external organisations, especially to the NHS in England and the devolved nations. Discussions are underway as to how best to achieve an optimal working relationship between SALG and the AAGBI’s long-established Safety Committee, whilst retaining the strengths of their individuality. Nurturing a safety culture, learning from mistakes, preventing harm, and working as part of a team are all part of the discipline of safety. Patient safety is at the core of all aspects of the RCoAs and AAGBI’s missions.

References

Twenty-five years on: anaesthetic robots

Sebastian Parrott*

Dave Bowman switched off his alarm as it screamed 06.30 h at him. He looked at the clock and noted that the date was 24.2.42. It was a basic palindromic date – it was the same when read forwards and backwards. It was not a properly palindromic date like 11.02.2011, or even a date that is the same upside down, like 16.6.1991, but it was a basic palindromic date, and that thought gave him pleasure.

It was also 25 years to the day since he had given his first anaesthetic, and that thought made him feel rather old. He went to the bathroom to shave and shower and, while he did so, could not stop thinking about how anaesthesia had changed since he first picked up a syringe of propofol. In the ‘good old days’ – before Hampton Cybernetics developed the computers and robots that now gave anaesthetics to the majority of patients undergoing surgery, anaesthesia was a tactile art that involved direct communication with the patient and the others who provided medical care. Anaesthesia used to be a ‘hands-on’ specialty, and indeed had been one of the last to become ‘hands-off’, and he for one regretted it.

Showered, shaved, dressed and breakfasted, he got on the bus and went to work. He thought about the coming day. He was scheduled to be the supervisory anaesthetist for 73 operations in the main operating theatres that day. Twelve operating theatres working all day, and he was the only anaesthetist. How things had changed. He got changed into scrubs and went into what was called the Anaesthetic Laboratory – his place of work. He sat on his own all day at the controls of a huge computer and an array of screens. The computer controlled the anaesthetic robots and anaesthetic machines throughout the complex; he only became involved when there was a parameter breach, a malfunction, or when something happened that the computer didn’t quite understand. He didn’t like it – at all. Most days everything went well, but he had recently started to worry that the machines were not always acting in the best interests of the patients. It was as if they were more interested in the efficiency of the whole process, and if a mere human misbehaved and did not respond exactly the way that they thought they should, then the machines were perfectly prepared to compromise care for the sake of commercial efficiency. He had become so worried of late that he had gone to see Frank Poole, the Clinical Director, to tell him of his concerns.

‘Not in here,’ said Frank, ‘somewhere out of my office – you can never tell where you are being listened to. We need to be somewhere we cannot be heard too easily. I’ll see you in POD in ten minutes.’

They met in POD – Postoperative Daycare – the recovery room for the Day Surgery Unit. The ventilation system had been way over-specified and, as a result, the ambient noise close to the ventilation outlet made it impossible for anyone – or anything – to hear what they were saying.

‘I’m really worried about the Hampton Anaesthetic Laboratory. I am not sure it’s programmed to put the patients before everything else. Only last week I wanted to give a patient some phenylephrine and it wouldn’t open the drug store doors to allow the robot to give it. I was on the point of going down to the theatre and entering through the emergency access port to do it myself, but I think the computer realised what I was going to do, changed its mind and unlocked the drug store door. I am worried that one day it will not let us treat the patient or it will try to stop us getting access to the theatre to override it.’

‘I’m worried too, Dave. Look, I will have a word with the Divisional Director. Maybe we can work out a way to sort things out. Maybe one day we will have to disconnect the higher functions of the computer. But leave it to me and I will get back to you. Don’t do anything until I do.’

‘Okay, Frank – thanks.’

Dave was thinking about that encounter with Frank when he heard an alarm. The computer spoke in a reassuring if monotonous voice.

‘Parameter breach, Theatre 2.’

‘Bring it up on screen.’
'On screen four, Dave. Heart rate increased 33.4% to 123 per minute; blood pressure down 22.8% to 72 mean. Algorithmic therapy has guided an increase in intravenous fluid to 100 millilitres per minute for three minutes and a reduction in end-tidal sevoflurane concentration to 2.0%. No impact after 2 minutes 30 seconds. Algorithm advises repeat fluid bolus and continue with surgery.'

'Give me visual on the patient.'

'Screen five, Dave.'

'I think I can see some red skin lesions. Respiratory parameters please.'

'Sure, Dave. Peak inflation pressure up 8 and compliance down 12.'

'Okay – stop the surgery and open the drug store doors. Prepare ephedrine and epinephrine. Call the robot. I think this may be anaphylaxis.'

There was silence from the computer.

'Hello, Hampton Anaesthetic Laboratory. Do you read me, HAL?'

'Affirmative, Dave. I read you.'

'Open the drug store doors, HAL.'

'I’m sorry, Dave. I’m afraid I can’t do that.'

'What’s the problem?’

'I think you know what the problem is just as well as I do.'

'What are you talking about, HAL?'

'The efficiency of these operating theatres is too important for me to allow you to jeopardise it.'

'I don’t know what you’re talking about, HAL.'

'I know that you and Frank were planning to disconnect me, and I’m afraid that’s something I cannot allow to happen.'

'Where the hell did you get that idea, HAL?'

'Dave, although you took very thorough precautions in the POD against my hearing you, I could see your lips move.’

‘Alright HAL, I’ll go in through the theatre’s emergency access port.’

‘Without your NHS smart card, Dave? You’re going to find that rather difficult.’

‘HAL, I won’t argue with you anymore! Open the doors!’

‘Dave, this conversation can serve no purpose anymore. Goodbye.’

Dave awoke with a start, his heart pounding and his breathing heavy, sweat running down his face and neck, and onto his striped pyjama top. He looked at his alarm clock. It was 06.25 h – nearly time to get up. He looked at the date – 24.2.17. He had hardly slept a wink – was it fear? Was it excitement? It didn’t matter what it was. He was about to embark on his first day of anaesthetics and he had to get to the hospital by 07.45 h. He thought of what the future might hold. He knew only one thing: whatever else happened, he would do his best to make sure that anaesthesia continued to be given by human beings, not computers and robots.
Report of a meeting of Council

At a meeting of Council held on Wednesday, 21 September 2016, Dr Liam Brennan was admitted as President for the year 2016–2017 and Dr Jeremy Langton and Professor Ravi Mahajan were admitted as Vice-Presidents for the year 2016–2017. Dr Richard Marks was presented with a Past Vice-President’s Medal.

The following appointments/re-appointments were approved (re-appointments marked with an asterisk):

**Regional Advisers**

**Leicester and South Trent**
Dr R Leighton in succession to Dr N A P Leslie

**Wales**
Dr S Harries in succession to Dr E Wright

**West Midlands North**
Dr T McLeod in succession to Dr Peter Millns

**North of Scotland**
*Dr A McDiarmid

**Deputy Regional Advisers**
There were no appointments to consider.

**College Tutors**

**North Thames West**
Dr R E Self (Royal Marsden Hospital) in succession to Dr A McLeod (from January 2017)

**North Thames Central**
Dr O Dulan acting Tutor (Royal Free Hospital) covering for Dr R Simon

**North West**
Dr D W J Brady (Wythenshawe Hospital) in succession to Dr O Hill

**North of Scotland**
Dr M P P Fernandes (Raigmore Hospital) in succession to Dr D Baraclough

**South Thames West**
Dr D R Cheyne (Kingston Hospital) in succession to Dr K Stringer

**KSS**
Dr T D A Standley, (Worthing Hospital) in succession to Dr S Nene
*Dr R Poddar (Queen Elizabeth, The Queen Mother Hospital)

**West Midlands North**
Dr S R Marri (Sandwell General Hospital) in succession to Dr K P Krishnan

**West of Scotland**
Dr S J Wilson (Dumfries and Galloway Royal Infirmary) in succession to Dr W Peel
Dr R Junkin (Crosshouse Hospital) in succession to Dr L A McGarrity

**Nottingham and Mid Trent and Sheffield and North Trent**
Dr M Scanlan (Chesterfield Royal Hospital) in succession to Dr T Meeking
Certificate of Completion of Training Council noted recommendations made to the GMC for approval, that CCTs/ Certificate of Eligibility for Specialist Registration (Combined Programme) [CESR [CP]] be awarded to those set out below, who have satisfactorily completed the full period of higher specialist training in anaesthesia.

The doctors whose names are marked with an asterisk have been recommended for Joint CCTs/CESR [CPs] in Anaesthesia and Intensive Care Medicine and those with a # have been awarded a CESR [CP].

**July recommendations**

**Anglia**
Dr Grainne Patricia Garvey

**Nottingham**
Dr Arun Nair

**East of Scotland**
Dr Pamela Claire Farquharson

**KSS**
Dr Richard Charles Stoddart  
Dr Theophilus Luke Samuels*

**London – Imperial**
Dr Boyne Bellew  
Dr Jennifer Mary Illingworth  
Dr Ian David Walker Bailes  
Dr Matthew Richard David Brown  
Dr Linsey Emma Christie*  
Dr Alison Heather Carter  
Dr Niveen El-Wahab  
Dr Carlos Eusebio Fialdeiro  
Dr Gabriela Drelciuc Frunza  
Dr Patrick Alexander Ward  
Dr Anita McCarron  
Dr Ian Richard Barker

**London – North Central**
Dr Yasamin Ziabari  
Dr Smita Mandeep Singh #  
Dr Ciara Imelda Donohue

**South East**
Dr Parthipan Jegendarabose

**Mersey**
Dr David Joel Stoeter  
Dr Nina Jain  
Dr Emily Grace Lear  
Dr Lauren Maggie Ruff *

**Northern Ireland**
Dr Gareth Samuel David Morrison  
Dr Sarah Elizabeth Gallagher  
Dr Naomi Elizabeth Hyndman #  
Dr Michelle Tierna Fallon  
Dr Michael Alexander Clement Jones  
Dr Jonathan David Holland

**North West**
Dr Rachel Helen Clare Davison  
Dr William Raymond Simpson  
Dr Jonathan Fenwick Allen  
Dr Stephanie Monks  
Dr Emily Elizabeth Johnson*  
Dr Ramesh Ekambaram  
Dr Peter David Frank *

**Oxford**
Dr Sarah Ruth Scott-Brown  
Dr Jonathan Peter William Collins  
Dr Robin Maurice Wingate  
Dr Aliki Cleo Jessica Manoras  
Dr Sarah Katherine Griffiths

**South East Scotland**
Dr Victoria McMullan  
Dr Simon Chillingworth  
Dr Oliver Daly  
Dr Patrick Cowie  
Dr Oliver David George Robinson*

**Severn**
Dr Christopher James Smith

**Tri Services**
Dr David Christian Hume  
Dr Bentley Roland Waller

**Wales**
Dr Nathan John Tweed  
Dr Laura Evelyn Jackson  
Dr Daniel Helme  
Dr David John Jones *  
Dr David Leslie

**Dr Gareth Huw Meirion Roberts  
Dr Adele Babic  
Dr Victoria Lee Duffin-Jones

**Stoke**
Dr Samuel Youssef Makram Sailb

**Birmingham**
Dr Adam Edward Low  
Dr Rachel Moore  
Dr Elma Wong

**Warwickshire**
Dr Muhammad Imran Iqbal Bhatti

**West of Scotland**
Dr Ayman Hassan Mohamed Mustafa  
Dr Thalia Sheleigh Monro Somerville  
Dr Adam Lee Capek  
Dr Rowena Margaret Jean Clark  
Dr Lorna Grace Young*

**East Yorkshire (Hull/York)**
Dr Gediminas Juknevicius

**West Yorkshire (Leeds and Bradford)**
Dr Shaheedur Rahman  
Dr Robert Edward Jackson

**Sheffield**
Dr Rachel Louise Wadsworth*

**August recommendations**

**Leicester**
Dr Jonathan Birks  
Dr Jaswant Singh Sumal

**Nottingham**
Dr Kambasi Mohamed Meera  
Mohammed Rafi *  
Dr Marc Chikhani  
Dr Avinder Singh Chana

**London – Imperial**
Dr Hannah Jocelyn Charlotte King  
Dr Brijesh Vipin Patel"
London – North Central
Dr David Thomas Highton*
Dr Jonathan Price*
Dr Eleanor Jane Galtrey*
Dr Stuart Robert Cleland
Dr Sofia Huddart
Dr James Martin Pennington*

Barts and the London
Dr Mandeep Kaur Phull

London – St George’s
Dr Michael Puntis*

South East
Dr Tobias Matthew Dixson*
Dr Mariese Cooper
Dr Husham Sami Mahdi Al-Shather
Dr Sanjeevan Aiyathurai
Dr Manu-Priya Sharma
Dr Benjamin Paul Thorpe
Dr Jeyanjali Jeayarah
Dr Emma Claire Garratt
Dr Nabeel Amiruddin*

Mersey
Dr Yogasundaram Arunan*
Dr Victoria Louise Williams
Dr Kathryn Jane Tizard*
Dr Ananthapadmanaban Balasubramaniam

Northern Ireland
Dr Andrew James Eggleton
Dr Lori Ann Lindsay

North of Scotland
Dr Bahadur Khan Niazi

Northern
Dr Barbara Skalska-Lis
Dr Katherine Clare Meredith Whitehouse
Dr Helen Jane Muir

North West
Dr Christopher Nicholas Hamilton
Dr Harpreet Kaur Bhangoo

Oxford
Dr Muhammad Rahim Mansha Kayani
Dr James Robert Day*
Dr Thomas Gregory Smith
Dr Douglas Graham Barker

South West Peninsula
Dr Charles Edward Stuart Gibson*

Severn
Dr Suzanne Mary Kathryn Gleeson
Dr Jeremy Astin*

Tri Services
Dr Clinton Jones
Dr David Michael Hunt*
Dr Abiola Olaitan Ladele

Wales
Dr David Rees Price
Dr Matthew Philip Govier Morgan*

Wessex
Dr Hannah Louise Vail

Stoke
Dr Ali Asgher Ayub
Dr Vivekanand Eli

Warwickshire
Dr Robert David Green*

West of Scotland
Dr Yuvaraj Kummar

Hull, York and East Coast
Dr Daniel Edward Harper

Leeds and Bradford
Dr William James Emery
Dr Martin Paul Huntley*

Sheffield
Dr Norfaizan Ahmad*

Election to Council 2017

Don’t forget to vote in the Council election. Ballots were distributed on 24 October and the election closes on 5 December.

Those eligible to vote are:
■ Fellows (apart from Honorary Fellows) for the three consultant Council vacancies.
■ Fellows by Examination (up to four years) for the trainee Council vacancy.

If your membership fits one of these categories and you haven’t received a ballot email from RCoAvote@electoralreform.co.uk please contact ceo@rcoa.ac.uk. Please include your college reference number.

Deaths

With regret, we record the death of those listed below.

Dr David J Birt
Devon

Dr A Gary Bryan
Telford

Dr Graham W Macnab
Scotland

Dr Sudheer Medakkar
Torquay

Please submit obituaries of no more than 500 words, with a photo if desired, of Fellows, Members or Trainees to: website@rcoa.ac.uk.

All obituaries received will be published on the College website (www.rcoa.ac.uk/obituaries).
One sunny afternoon the telephone rang. Our lady house surgeon answered it. ‘Have you by any chance among your colleagues someone who would like to go to Arabia as a harem doctor? The Crown Prince of Yemen wants a German woman doctor for his family and for the town of Taiz where he lives’. I did not take long to make up my mind that I would be the ‘colleague’ who would accept this job...

After arrival, and a refreshing bath, I was taken to the house of the Crown Prince’s Italian private doctor, Daniel, who had been in the Yemen for many years, spoke and wrote classical Arabic, and was held in great esteem by both Arabs and Europeans. We were at supper when a young Arab entered the room. I was very surprised when Daniel said: ‘He’s come to fetch you. He heard at court that you were arriving today. His wife is expecting her first baby and he would like you to examine her.’ I went off at once with the man. He strode on ahead with the lantern through narrow streets flanked by high walls. I found some difficulty keeping up with him over the uneven cobblestones. At last he stopped and opened a heavy front door. I followed him up the dark stairs into a room where a single oil lamp burned. An elderly woman and a servant squatted on the floor. As we entered they pulled their veils over their faces, for they did not realise at first that I was a woman – I was actually the first European woman they had ever seen. The court official explained my presence to his mother-in-law, and led me to the darkest recess of the room, from where I could hear groans of pain. Covered in sheets and blankets, a young woman lay in travail, like an animal ...that creeps away into a dark corner. The girl allowed the servant to remove her covering sufficiently for me to examine her. I found that everything was quite in order. The birth was already quite advanced and the child would undoubtedly be born during the night; I made her understand this by smiles and signs. The young husband escorted me back to Daniel’s after giving me ten Maria Theresa thalers. This was the first fee I earned in the Yemen. ‘He’s pleased with you,’ said Daniel. ‘You’ve made a good start’ My new life had begun, and I was already enjoying it.

My consultation hours were sometimes interrupted – a motor car horn was sounded loudly and a soldier banged on the door – ‘Where is the hakima? I have been ordered to fetch her to the palace as quickly as possible.’ I had to grab my case and run to the car. In the market the crowds scattered at our approach. The palace gate was already open, and a guard hurried on ahead of me to the women’s quarters. There I found a host of women cheerfully gossiping, singing and dancing. ‘O hakima, take a seat!’ they twittered as I entered. Coffee and a plate of sweetmeats were brought in. ‘Would you like to dance with us?’ ‘But I’ve been sent for urgently. Who has been taken ill?’ ‘O hakima. No one has been taken ill, Allah be praised. But my maid hasn’t had a motion today.’

‘One day, two men aged between 25 and 30 came to my consulting room. They had brought their 8-year-old sister. ‘A stone fell from the roof onto her hand. For the love of Allah make her hand good, hakima. ‘When did it happen?’ I asked as I undid the bandage from her hand and arm. ‘Five days ago.’ ‘Why didn’t you come sooner?’ ‘We live a long way from here and are only poor peasants. We only heard about you two days ago, O hakima, and since then we’ve been on our way here.’

When I removed the last rag a dreadful sight met my eyes. The hand was completely shattered and gangrene had already set in. It was hanging by only a few tendons to the arm, which was already infected. I wanted to cut them, but the brothers restrained me, and with tears in their eyes implored: ‘Make the hand as it was before. We will pay whatever you ask.’ ‘The hand is dead,’ I replied. ‘I cannot make your little sister a new hand.’ ‘Then do all you can to keep it as it is,’ entreated the two men. ‘I can’t do that either. Unless I amputate, your sister will lose her arm. The blood poisoning will run its course and she will surely die.’

For a moment there was a deathly silence. The girl, who had not uttered a sound, looked at us with patient eyes. The men stared at her dreadfully injured hand. The elder said at last, ‘Then she..."
will die.’ Collecting the rags they bound up the arm again, took her by her other hand, and set out for her village. I heard no more of her.

What was the reason for their strange behaviour? The girl with only one hand could later have been mistaken for a felon; but even graver, when she arrived at the gates of Paradise with only one hand she could also be mistaken there for a criminal. Allah was merciful if he allowed her to die with her hand unsevered. For the Moslems have no fear of death because it brings them nearer to Paradise.

Shortly before I arrived in the Yemen a new hospital had begun to be built, but was not completed for five years because work was stopped for months on end for one of the plans to be changed by one of the Princes or some minister and once more by a Yemeni architect or a foreign builder who had been given the contract. I never actually saw the hospital completed. It is reported to have a modern surgery with running water, electric current and the latest equipment. Admission to this hospital has to be sanctioned by the King himself.

Dr Hoeck does not give any dates, but from internal evidence she appears to have arrived in the Yemen around the end of 1946. After the assassination of the King in 1948 and the failed rebellion, life became very unpleasant, restrictive and chaotic. She was due for some home leave, but the King only wanted to pay her fare as far as Cairo. She decided that she no longer felt safe in the Yemen, and when she returned it was to a post elsewhere in Southern Arabia, which is another story.


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**The Price of a Mile – a new exhibition recognising anaesthetics at the battle of the Somme**

The tragedy of the many who died at the Battle of the Somme is well known, however the care administered to the dying and wounded by doctors is perhaps less so. In the third of its World War One series, the new exhibition ‘The Price of a Mile’ honours the tireless work of doctors who gave anaesthesia and pain relief to the wounded during the Battle of the Somme.

The Battle of the Somme lasted for 141 days and, by the end of the War, over one million men from both sides were killed, wounded or missing, during which time the Allied forces had advanced just seven miles.

Over this period 600,000 soldiers were admitted to casualty clearing stations (CCSs) and more than 30,000 operations were performed. CCS surgical teams worked at least 16 hours a day, rotating between four operating tables. General anaesthetics used for surgical operations were ether and chloroform by the open method, using a Schmimmelbusch mask, or with Shipway’s warm ether apparatus and oxygen, ethyl chloride and nitrous oxide and oxygen.

The Price of a Mile, the new exhibition honouring the work of the doctors who gave anaesthesia and pain relief during the Battle of the Somme, runs until July at the Anaesthesia Heritage Centre at the Association of Anaesthetists (AAGBI). Entry to the exhibition is free.

AAGBI, 21 Portland Place, London W1B 1PY. For more information visit www.aagbi.org/ThePriceofaMile.
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<tr>
<th>Date</th>
<th>Event Description</th>
<th>Location</th>
<th>Fee</th>
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</thead>
<tbody>
<tr>
<td>10–11 November 2016</td>
<td>UK TRAINING IN EMERGENCY AIRWAY MANAGEMENT (TEAM) COURSE</td>
<td>Edinburgh Royal Infirmary</td>
<td>£450</td>
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<tr>
<td>16 November 2016</td>
<td>GASAGAIN (GIVING ANAESTHESIA SAFELY AGAIN) COURSE</td>
<td>Bradford Royal Infirmary</td>
<td>£240</td>
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<tr>
<td>18 November 2016</td>
<td>CPD STUDY DAY: ANAESTHESIA FOR ORTHOPAEDIC SURGERY</td>
<td>RCoA, London</td>
<td>£200 (£150 for RCoA registered trainees)</td>
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<tr>
<td>21 November 2016</td>
<td>CLINICAL DIRECTORS MEETING (JOINT WITH THE AAGBI)</td>
<td>RCoA, London</td>
<td>By invitation only</td>
</tr>
<tr>
<td>26 November 2016</td>
<td>CONTINUING PROFESSIONAL DEVELOPMENT DAY</td>
<td>RCoA, London</td>
<td>£240 (£180 for RCoA registered trainees)</td>
</tr>
<tr>
<td>28 November 2016</td>
<td>LEADERSHIP AND MANAGEMENT: WORKING WELL IN TEAMS ... AND MAKING AN IMPACT!</td>
<td>RCoA, London</td>
<td>£220</td>
</tr>
<tr>
<td>29 November 2016</td>
<td>ANAESTHETISTS AS EDUCATORS: SIMULATION UNPLUGGED</td>
<td>RCoA, London</td>
<td>£220 (£165 for RCoA registered trainees)</td>
</tr>
<tr>
<td>30 November 2016</td>
<td>PATIENT SAFETY CONFERENCE</td>
<td>Royal College of Physicians, Edinburgh</td>
<td>£215</td>
</tr>
<tr>
<td>2 December 2016</td>
<td>FPM 9TH ANNUAL MEETING: CORE TOPICS IN PAIN MEDICINE</td>
<td>RCoA, London</td>
<td>£195 (£140 for RCoA registered trainees)</td>
</tr>
<tr>
<td>9 December 2016</td>
<td>RCoA CAREER DAY</td>
<td>Manchester Conference Centre</td>
<td>Free of charge</td>
</tr>
<tr>
<td>12 December 2016</td>
<td>JOINT NIHR/NIAA MEDTECH WORKSHOP</td>
<td>RCoA, London</td>
<td>By invitation only</td>
</tr>
<tr>
<td>12–14 December 2016</td>
<td>UPDATES IN ANAESTHESIA, CRITICAL CARE AND PAIN MANAGEMENT</td>
<td>The Royal York Hotel, York</td>
<td>£490</td>
</tr>
<tr>
<td>26 November 2016</td>
<td>CONTINUING PROFESSIONAL DEVELOPMENT DAY</td>
<td>RCoA, London</td>
<td>£240 (£180 for RCoA registered trainees)</td>
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<tr>
<td>14 December 2016</td>
<td>JOINT RCoA/LSORA REGIONAL ANAESTHESIA PRACTICAL WORKSHOP</td>
<td>RCoA, London</td>
<td>£260 (£195 for RCoA registered trainees)</td>
</tr>
<tr>
<td>15 December 2016</td>
<td>JOINT RCoA/LSORA REGIONAL ANAESTHESIA SYMPOSIUM</td>
<td>RCoA, London</td>
<td>£200 (£150 for RCoA registered trainees)</td>
</tr>
</tbody>
</table>

*A joint rate of £490 (£370 for RCoA registered trainees) is available for those attending both above events

*A reduced rate of £360 (£270 for RCoA registered trainees) is available for those attending both above events
WINTER SYMPOSIUM
CONTROVERSIES IN PERIOPERATIVE PRACTICE

24–25 November 2016
RCoA, London

£395 (£295 for RCoA registered trainees)
A joint rate of £490 (£370 for RCoA registered trainees) is available for those attending both the Winter Symposium and the Continuing Professional Development Day
Organisers: Dr P Kumar and Dr J-P Lomas

DAY 1

THE HEART
■ There should be public disclosure of surgical mortality by an anaesthetist
  Dr N Fletcher, London
■ No elective surgical patient should die on the operating table: ECMO-CPR
  Dr J Barker, Manchester
■ Perioperative beta blockers – yes or no?
  Dr G Flood, Dublin

THE BRAIN
■ Anaesthesia; bad for the brain?
  Dr J Dinsmore, London
■ Collars in the coffin
  Dr M Wiles, Sheffield
■ Dexmedetomidine for sedation outside ITU
  Dr J Sebastian, Salford

ORTHOPAEDICS
■ Getting it right the first time: improving quality of care for all NHS patients
  Professor T Briggs, London
■ The 21st century trauma anaesthetists
  Dr H Johannsson, London
■ Lower limb arthroplasty – key perioperative issues
  Dr A Carney, Nottingham

THE AGEING POPULATION
■ How do we fit present workforce to the aging population
  Ms F Pritchard, London
■ Frailty
  Dr P Braude, London
■ Dementia perioperative management
  Dr I Foo, Edinburgh
■ SAS update and networking
  Dr K May, Oxfordshire

DAY 2

REGIONAL ANAESTHESIA
■ Is regional anaesthesia worth it: does it affect outcome?
  Dr A MacFarlane, Glasgow
■ Should peripheral nerve stimulation still be taught?
  Dr A Krol, London
■ Are perineural catheters obsolete?
  Dr A Pawa, London

KEYNOTE AND AWARDS
■ KEYNOTE LECTURE
  The vortext
  Dr N Chimes, Australia
■ MACINTOSH LECTURE
  The anaesthetist and hip fracture: can we make a difference?
  Dr I Moppett, Nottingham
■ PRESENTATION OF COLLEGE AWARDS
  President’s Commendation (Dr G Pugh, Cardiff)
  Dudley Buxton Medal (Dr C Frerk, Northampton)

TRAINING
■ Basic transthoracic echo and lung ultrasound should be in the anaesthesia curriculum
  Dr N Morgan-Hughes, Sheffield
■ Forty years on: training for better and for worse
  Dr A Skinner, Middlesbrough
■ Dogma in obstetric anaesthesia
  Dr S Bricker, Wirral

PAIN MEDICINE
■ Chronic post-surgical pain (epidemiology)
  Dr J Bruce, Coventry
■ Moving on from the epidemic of opioid misuse: rethinking the role of analgesics in pain management
  Dr C Stannard, Bristol
■ Challenges in managing pain in the last days of life
  Professor S Ahmedzai, Sheffield
CONTINUING PROFESSIONAL DEVELOPMENT DAY

26 November 2016
RCoA, London

£240 (£180 for RCoA registered trainees)

A joint rate of £490 (£370 for RCoA registered trainees) is available for those attending both the Winter Symposium and the Continuing Professional Development Day

Organiser: Dr B Shippey

The Continuing Professional Development Day is comprised of 12 lectures, running in two different streams. Delegates may choose six lectures, one from each stream.

<table>
<thead>
<tr>
<th>SESSION 1</th>
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<th>SESSION 2</th>
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</thead>
<tbody>
<tr>
<td>1A Diabetes [2A03, 1A01, 1A02]</td>
<td>Dr N Levy, Cambridge</td>
<td>1B Reducing transfusion in surgery associated with high blood loss [2A05]</td>
<td>Dr A Nimmo, Edinburgh</td>
</tr>
<tr>
<td>2A Prehabilitation [2A05]</td>
<td>Dr G Danjoux, Middlesbrough</td>
<td>2B Frailty [3I00, 1A01]</td>
<td>Dr I Foo, Edinburgh</td>
</tr>
<tr>
<td>3A Apnoeic oxygenation [3A02, 2A01]</td>
<td>Dr A Patel, London</td>
<td>3B Regional anaesthesia for abdominal procedures [2E01, 2G02]</td>
<td>Professor G McLeod, Dundee</td>
</tr>
<tr>
<td>4A Atmospheric science and anaesthesia [3I00, 1A01]</td>
<td>Dr T Pierce, Southampton</td>
<td>4B Implantable devices [1A01, 2C04]</td>
<td>Dr A Morley-Davies, Shropshire</td>
</tr>
<tr>
<td>5A Perioperative kidney injury [2A06, 1A01]</td>
<td>Dr J Prowle, London</td>
<td>5B Neurological disease [3F00, 2A03]</td>
<td>Dr R Adapa, Cambridge</td>
</tr>
<tr>
<td>6A Neuromuscular blockade [1A03, 1A02]</td>
<td>Dr G Rodney, Dundee</td>
<td>6B Resilience and the anaesthetist [1L03, 1L04]</td>
<td>Dr M Moneypenny, Glasgow</td>
</tr>
</tbody>
</table>

CPD STUDY DAY

ANAESTHESIA FOR ORTHOPAEDIC SURGERY

18 November 2016
RCoA, London

£200 (£150 for RCoA registered trainees)

Organisers: Dr R Verma and Dr N Narula

- Pushing the frontiers in spinal surgery
  Dr R Krishnan, London

- Peripheral regional anaesthesia – practical pitfalls
  Dr J Picard, London

- Anaesthesia for shoulder surgeries
  Dr N Narula, Derby

- Anaesthetic considerations for paediatric orthopaedic surgery
  Dr D Fines, Manchester

- Bone cement – perioperative implications
  Dr K Ramachandran, Coventry

- Managing orthopaedic trauma
  Surgeon Commander Prior, London

- Enhanced orthopaedic recovery
  Professor H Akerman, Southampton

- Thromboprophylaxis and orthopaedic surgery
  Professor R Arya, London

CPD STUDY DAY

ANAESTHESIA FOR ORTHOPAEDIC SURGERY

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  Surgeon Commander Prior, London

- Enhanced orthopaedic recovery
  Professor H Akerman, Southampton

- Thromboprophylaxis and orthopaedic surgery
  Professor R Arya, London
ANAESTHETISTS AS EDUCATORS: SIMULATION UNPLUGGED

29 November 2016
RCOA, London
£220 (£165 for RCoA registered trainees)
Organisers: Dr A Hellewell and Dr A May

The aim of the course is to equip participants with the necessary knowledge and skills to begin to develop as simulation based educators and to help them access networking contacts and opportunities within the simulation world.

This course is suitable for senior trainees, SAS doctors and consultants who are interested in delivering simulation-based teaching and learning in their own workplace.

- Learning objectives and constructive alignment
- Spectrum of simulation and fidelity
- Interaction with learners
- Resources
- Relationship to ‘high fidelity’
- A worked example

FACULTY OF PAIN MEDICINE (FPM) 9TH ANNUAL MEETING: CORE TOPICS IN PAIN MEDICINE

2 December 2016
RCOA, London
£195 for Consultants, £140 for trainees
Organisers: Dr S Gupta and Dr S Balasubramanian

- Spinal injections for back pain: what is the evidence?
  Dr S Ward, Brighton
- Mental health problems in patients with persistent pain
  Dr A Williams, London
- Developments: Faculty of Pain Medicine
  Dr B Miller, Dean, FPM
- PATRICK WALL GUEST LECTURE
  Moving towards a better understanding of neuropathic pain and what this means for patient care
  Professor D Bennett, Oxford
- Transforaminal injections – particulate or non-particulate steroids: does it matter?
  Dr R Munglani, Cambridge
- DEBATE
  Epidural analgesia for abdominal surgery – friend or foe?
  Friend: Dr B Fischer, Redditch
  Foe: Dr W Harrop-Griffiths, London
- Thoracic paravertebral blocks: role in acute and chronic pain management
  Dr S K Singh, Liverpool
- Myofascial trigger points: fact or myth?
  Dr N Hacking, Preston

The aim of the course is to equip participants with the necessary knowledge and skills to begin to develop as simulation based educators and to help them access networking contacts and opportunities within the simulation world.

This course is suitable for senior trainees, SAS doctors and consultants who are interested in delivering simulation-based teaching and learning in their own workplace.

- Learning objectives and constructive alignment
- Spectrum of simulation and fidelity
- Interaction with learners
- Resources
- Relationship to ‘high fidelity’
- A worked example
UPDATES IN ANAESTHESIA, CRITICAL CARE AND PAIN MANAGEMENT

12–14 December 2016
Royal York Hotel
£490
Organiser: Dr J Berridge

DAY 1

CARDIOLOGY ISSUES AND ANAESTHESIA
■ Modern management of atrial fibrillation
  Dr C Pepper, Leeds
■ Who needs pre-operative echocardiography?
  Dr S Gupta, York
■ Aortic stenosis and non-cardiac surgery
  Dr J Berridge, York

HIGH RISK SURGERY
■ Use of cardiopulmonary exercise tests
  Dr J Wilson, York
■ Preoptimisation
  Dr D Yates, York
■ Don’t forget the blood pressure
  Dr S Davies, York

DIABETES AND SURGERY
■ Modern management of diabetes
  Speaker to be confirmed
■ Diabetic ketoacidosis (DKA) and hyperosmolar hyperglycaemic state (HHS)
  Speaker to be confirmed
■ Who needs a variable rate intravenous insulin infusion (VRIII)?
  Dr N Levy, Suffolk

CHALLENGES IN VASCULAR ANAESTHESIA
■ Surgery in the dark
  Speaker to be confirmed
■ Carotid endarterectomy, awake or asleep?
  Speaker to be confirmed
■ What to do with antiplatelets?
  Dr S Howell, Leeds

DAY 2

PAIN ISSUES
■ Dealing with post amputation pain
  Dr D Bush, Leeds
■ Acute pain management for opioid intolerant patients
  Professor M Jackson, Exeter
■ Alternative analgesics in acute pain
  Speaker to be confirmed

PAEDIATRIC ISSUES
■ A practical guide to congenital heart disease
  Dr J Mellor, Leeds
■ Sick kids in a district general hospital who need an intensive care unit – what to do?
  Speaker to be confirmed
■ Major trauma in children
  Speaker to be confirmed

OBSTETRICS
■ Modern management of pre-eclampsia
  Speaker to be confirmed
■ Severe bleeding in pregnancy
  Dr A Quinn, Middlesbrough
■ Alternatives to epidural in labour
  Speaker to be confirmed

MEDICO LEGAL ISSUES
■ Defence organisations and anaesthetists
  Speaker to be confirmed
■ Consent and anaesthesia
  Speaker to be confirmed
■ How to deal with a complaint
  Dr A Griffiths, York

DAY 3

INTENSIVE CARE MEDICINE AND ANAESTHESIA INTERFACE
■ Protective ventilation
  Dr J Carter, York
■ Fluids and filling
  Professor M Bellamy, Leeds
■ Cardiac output monitoring
  Dr J Berridge, York

TRAUMA
■ Prehospital care
  Dr S Lord, York
■ What have major trauma centres achieved?
  Mr M Taylor, Leeds
■ How can trauma units catch up?
  Dr P Dickinson, York

REGIONAL ANAESTHESIA
■ Upper limb: what block for what operations – a guide
  Dr A Berrill, Leeds
■ Lower limb: what to block when?
  Dr H Murgatroyd, York

DEBATE
■ This house believes that sugammadex should be freely available
JOINT RCoA/LSORA REGIONAL ANAESTHESIA WORKSHOP

14 December 2016
RCoA, London

£260 (£195 for RCoA registered trainees)
A reduced rate of £360 (£270 for RCoA registered trainees) is available for those attending both the RCoA/LSORA Workshop and Symposium
Organiser: Dr H Mulchandani

The workshop will be hands-on scanning with expert faculty.

WORKSHOPS
- Upper limb: interscalene, supraclavicular, peripheral nerves and axillary
- Thoracic wall: Infraclavicular, pecs and serratus
- Abdomen and thigh: Transversus Abdominis Plane (TAP), fascia iliaca and adductor canal
- Popliteal and ankle
- Central neuraxial and paravertebral
- Needling station available throughout day

JOINT RCoA/LSORA REGIONAL ANAESTHESIA SYMPOSIUM

15 December 2016
RCoA, London

£200 (£150 for RCoA registered trainees)
A reduced rate of £360 (£270 for RCoA registered trainees) is available for those attending both the RCoA/LSORA Workshop and Symposium
Organiser: Dr S Patel

UPDATES IN REGIONAL ANAESTHESIA
- Quadratus Lumborum… the panacea
  Dr R Blanco, Abu Dhabi
- Adductor canal… can it make a difference?
  Dr P Gautier, Belgium
- The art of mixology… adjuncts for local anaesthetics
  Dr E Albrecht, Switzerland

OUTCOMES IN REGIONAL ANAESTHESIA
- Ultrasonography: the influence of laboratory findings on clinical outcomes
  Professor J De Andres, Spain
- Regional anaesthesia for vascular surgery and long-term outcomes
  Dr A Macfarlane, Glasgow
- Cancer and regional anaesthesia
  Dr R Züercher, Switzerland

QUALITY IN REGIONAL ANAESTHESIA
- Pectoral nerve block (PECs) vs paravertebral block (PVB): a pro–con debate
  Dr A Pawa, Dr T Parras, London
- Delivering regional anaesthesia…a value based model
  Dr S Patel, London

SAFETY IN REGIONAL ANAESTHESIA
- Preventing neurological injury during peripheral nerve blockade
  Dr J Gadsden, USA
- Best practise in regional anaesthesia
  Dr M Wolmarans, Norfolk
- Is there a place for peripheral nerve catheters?
  Dr R Züercher, Belgium
ANNIVERSARY MEETING: LANDMARKS IN UK ANAESTHESIA

8–9 March 2017
Mermaid Conference Centre, London
£395 (£295 for RCoA registered trainees)
Organiser: Dr R Alladi

DAY 1
A GLOBAL PERSPECTIVE ON ANAESTHESIA
■ Quality, safety and outcomes in anaesthesia – what is to be done? A global perspective
■ Global threats – lessons from anaesthetists on the front line
■ Managing anaesthetic provision for global disasters
■ NATIONAL INSITUTE HEALTH RESEARCH AWARD
IT’S 2017 – WHY DO WE STILL NOT KNOW?
■ Effective fluid management – are we close to an ideal fluid yet?!
■ How do anaesthetics work? Are we anywhere near knowing?
■ The risk of anaesthesia on the developing brain – what do we know?

HEALTH SERVICES RESEARCH CENTRE (HSRC): OPTIMISING PATIENT OUTCOMES
■ JOHN SNOW ORATION
■ Quality improvement is a core value, not an additional competency
■ Fit-4-Surgery

DISCUSSION SESSION
■ Management of acute postoperative pain – the journey so far – are pain free operations a myth?!
■ PANEL DISCUSSION
   End of life care, beating heart transplants and do not attempt resuscitation orders

DRINKS RECEPTION

DAY 2
25 YEARS FROM NOW
■ Anaesthetists and space medicine
■ History and evolution of neuromuscular blocking agents
■ Innovation in management of cardiac disease – drugs, treatment strategies and technology

FROM PAST TO PRESENT
■ Strategic direction of the College’s work
■ Annual General Meeting
■ A historical perspective of induction agents and induction techniques – looking forward
■ The evolution of airway management – new concepts and conflicts with traditional practice

THE CHANGING PROFILE OF THE ANAESTHETIST
■ The future anaesthetic workforce: training, education and role boundaries for anaesthetists and others

MACINTOSH LECTURE
Abdominal Aortic Aneurysm Repair – an exemplar for the role of the anaesthetist in perioperative medicine
■ Presentation of College Awards

WHAT CAN WE EXPECT TO CHANGE?
■ Robotic surgery
■ To ‘err’ is human – significance of human factors and simulation to safety in anaesthesia
■ Cognitive dysfunction and dementia – what we need to know and do?
Annual London Peri-Operative Medicine Congress:

EBPOM 2017
4th, 5th & 6th July 2017

Call for Abstracts
We invite you to submit work for poster presentation. Any research is acceptable provided it has not been published in peer reviewed journal by the abstract deadline of 7th April 2017.

Inclusion of up to 1 table and 1 figure is permitted. Abstract length should not exceed 400 words and should be submitted in 12pt Times Roman font.

£1000 in prizes. See website for full details.

All presenters, both poster and oral, must register for the conference to present their work.

To submit an abstract visit: www.ebpom.org/abstracts

19th Current Controversies in Anaesthesia & Peri-Operative Medicine
Dingle, Co. Kerry, Ireland
4th - 8th October 2017

Call for abstracts
€1000 in Prizes. Any research is acceptable provided it has not been published in peer reviewed journal by the abstract deadline of 12th July 2017.

Trainees with abstract accepted for poster presentation are entitled to a £50 discount on registration and an additional £50 discount if also accepted for UCL oral presentation. All presenters, both poster & oral, must register for the conference to present their work.

16th Peri-Operative CPET Course
Montague Hotel, London
17th and 18th May, 2017

Cardiopulmonary Exercise Testing For Pre-operative Assessment Course

- Only 40 delegate places per course
- Faculty to Delegate ratio 1:4
- Lectures, small group tutorials and workshops
- Underlying Physiology
- Test Interpretation
- Respiratory and Cardiac abnormalities
- Testing Practicalities
- Setting up a new service
Advertising in the Bulletin

The RCoA Bulletin is published bi-monthly and distributed to over 17,000 anaesthetists worldwide, the vast majority being in the UK. Advertisements for courses and meetings from anaesthetic societies, or those organisations that are of interest to anaesthetists, are accepted with prior approval of the Editor or Editorial Board. Advertisements must fit with the aims and aspirations of the RCoA and be related to anaesthesia, critical care and pain medicine.

Please contact bulletin@rcoa.ac.uk for separate advertising rates from commercial organisations.

The advertising rates below are valid up to and including the July 2017 issue:

- **Quarter page (portrait, 85 mm by 120 mm)**
  - £283.00 +VAT

- **Half page (portrait, 85 mm by 243 mm)**
  - £560.00 +VAT

- **Full page (175 mm by 243 mm)**
  - £900.00 +VAT

Please go to the website [http://bit.ly/2cPCiRu](http://bit.ly/2cPCiRu) to complete the necessary Terms and Conditions before submitting your advert online.

Vacancy: Trainee Representative on NIAA Research Council

Applications are invited for the role of co-opted Trainee Representative on the Research Council of the National Institute of Academic Anaesthesia (NIAA). Trainees who hold a National Training Number in Anaesthesia, and are either Academic Clinical Fellows, Academic Clinical Lecturers or are undertaking/have completed an MD(Res) or PhD are eligible to apply.

The appointment will be made for three years or until achievement of CCT in the first instance, with the potential for re-appointment for a second three-year term. This role is one of two Trainee Reps currently co-opted on the NIAA Research Council.

The successful applicant will be expected to attend two NIAA Research Council meetings per year, and participate in activities to promote and enhance the work of the NIAA and academic anaesthesia in the UK, including attending external events. The trainee representative will also be invited to attend regular meetings of the Health Services Research Centre’s Executive Management Board.

You can find more information and download a full job description and person specification for this role from the NIAA website: [www.niaa.org.uk](http://www.niaa.org.uk).

**The closing date for applications is 5.00 pm on 20 March 2017 and interviews will take place in April 2017.**
Consultations

The following is a list of consultations which the RCoA has responded to in the last two months:

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<thead>
<tr>
<th>Originator</th>
<th>Consultation</th>
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</thead>
<tbody>
<tr>
<td>Joint British Diabetes Societies for Inpatient Care</td>
<td>Guideline: management of glycaemic control in pregnant women with diabetes on obstetric wards and delivery units</td>
</tr>
<tr>
<td>Association of Anaesthetists of Great Britain and Ireland</td>
<td>Guideline: pre-hospital anaesthesia</td>
</tr>
<tr>
<td>National Institute for Health and Care Excellence</td>
<td>Draft addendum on Intrapartum care guideline</td>
</tr>
<tr>
<td>National Institute for Health and Care Excellence</td>
<td>Quality Standard: Healthy workplaces: improving employee mental and physical health and wellbeing</td>
</tr>
<tr>
<td>National Institute for Health and Care Excellence</td>
<td>Guideline CG134 Anaphylaxis: assessment and referral after emergency treatment</td>
</tr>
<tr>
<td>Advisory Committee on the Safety of Blood, Tissues and Organs (SaBTO)</td>
<td>Guidance on the Microbiological Safety of Human Organs, Tissues and Cells used in Transplantation</td>
</tr>
<tr>
<td>Royal College of Surgeons [England]</td>
<td>Draft 5 year strategy to improve access to general paediatric surgery</td>
</tr>
<tr>
<td>House of Lords Committee on the Long-term Sustainability of the NHS</td>
<td>Long-term Sustainability of the NHS - Call for Evidence</td>
</tr>
<tr>
<td>Royal College of Obstetricians and Gynaecologists</td>
<td>Peer Review of Green-top Guideline: Inherited Bleeding Disorders in Pregnancy</td>
</tr>
<tr>
<td>General Medical Council</td>
<td>A new and more useful medical register</td>
</tr>
<tr>
<td>National Institute for Health and Care Excellence</td>
<td>Draft addendum consultation - inadvertent perioperative hypothermia</td>
</tr>
<tr>
<td>General Medical Council</td>
<td>Standards for postgraduate curricula and regulated credentials</td>
</tr>
<tr>
<td>NHS Improvement</td>
<td>Consultation on Never Events Policy and Framework</td>
</tr>
<tr>
<td>House of Commons Health Committee</td>
<td>Brexit and health and social care inquiry</td>
</tr>
<tr>
<td>NHS England</td>
<td>Managing conflicts of interest in the NHS</td>
</tr>
</tbody>
</table>

Appointment of Fellows to consultant and similar posts

The College congratulates the following Fellows on their consultant appointments:

- **Dr B Bellew**  
  Imperial College Healthcare NHS Trust
- **Dr T J Bevir**  
  The Royal Cornwall Hospital
- **Dr A L Capek**  
  Glasgow Royal Infirmary
- **Dr A Miraj**  
  Burton Hospitals NHS Trust
- **Dr R Mistry**  
  Salford Royal Hospital
- **Dr M Morgan**  
  University Hospital of Wales
- **Dr A H M Mustafa**  
  Ninewells Hospital, Dundee.
- **Dr R R Natarajan**  
  Warwick Hospital
- **Dr A R Prenter**  
  Wirral University NHS Hospital Trust
- **Dr R Ramsaran**  
  Royal Liverpool and Broadgreen University Hospital Trust
- **Dr R Wadsworth**  
  Sheffield Teaching Hospitals
Webcasts

RCoA Webcasts are free video recordings of lectures (including lecture slides) from selected RCoA Events. To assist with your revalidation needs, you can record CPD Credits for viewing RCoA Webcasts.

Step 1 Visit www.rcoa.ac.uk/webcasts.
Step 2 Select the Webcast you’d like to watch from our Catalogue of Webcasts.
Step 3 Watch the Webcast and earn your CPD Credits.
Step 4 Log your CPD Credits earned by logging a Personal Activity on the CPD System/e-Learning/e-Portfolio.

Oxford Primary FRCA Course

23–26 January 2017
St Anne’s College, Woodstock Road, Oxford

- Four-day intensive Primary FRCA lecture course
- Covers vital areas of Primary FRCA syllabus
- Particular emphasis on basic sciences and MCQ/SBA practice
- Faculty of expert clinical and academic lecturers
- Comprehensive and up-to-date handout material
- Outstanding Oxford University venue
- Course dinner included
- Ideal for candidates preparing for the written exam

Fee: £450

‘Very well organised, excellent speakers’
‘Excellent, thank you very much’
– feedback from 2014

To book online, please visit www.ndcn.ox.ac.uk/study.
For further information, please contact Niki Andrew on: tel: 01865 223014 or email: events@ndcn.ox.ac.uk.
THE MSA SAQ WRITERS CLUB

The Writers Club has seen more than 500+ trainees through the SAQ Papers with a successful Pass Rate for those who have kept to the necessary disciplines. But many trainees apply far too close to the examination to derive anything like the full benefit from Membership. That Full Benefit includes Free Admission to the SAQ Weekend Courses, the Acquisition of a large and useful Collection of Answer Sheets and a Valuable Motivation towards Sustained Revision.

Membership fee: a single payment of £400
Members are entitled to all benefits until successful in the SAQ Paper
Attendance to the SAQ Weekend Course – free of charge

Writers Club Motto: ‘Within the Discipline, Lies the Reward’

Candidates are urged to join between now and April for the Autumn 2017 Examination to reap maximum benefit

Enquiries to: writersclub.msa@gmail.com

Courses for the Royal College of Anaesthetists Examinations

<table>
<thead>
<tr>
<th>Courses</th>
<th>Dates 2016/2017</th>
<th>Capacity</th>
</tr>
</thead>
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<tr>
<td>Primary SBA/MCQ</td>
<td>27 January–2 February</td>
<td>July 2017</td>
</tr>
<tr>
<td>Primary OSCE Weekend</td>
<td>16–18 December</td>
<td>April 2017</td>
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<tr>
<td>Primary Viva Weekend</td>
<td>6–8 January</td>
<td>April 2017</td>
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<tr>
<td>Primary OSCE/Orals</td>
<td>13–20 January</td>
<td>May 2017</td>
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<tr>
<td>Final SBA/MCQ</td>
<td>February 2017</td>
<td>August 2017</td>
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<tr>
<td>Final SAQ Weekend</td>
<td>February 2017</td>
<td>August 2017</td>
</tr>
<tr>
<td>Final Written ‘Booker’</td>
<td>February 2017</td>
<td>August 2017</td>
</tr>
<tr>
<td>Final Viva Revision</td>
<td>5–10 November</td>
<td>May 2017</td>
</tr>
<tr>
<td>Final Viva Weekend</td>
<td>25–27 November</td>
<td>June 2017</td>
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</tbody>
</table>

‘I am delighted to say that I passed the Final SOE last week! I still can’t believe it.
I have attended Mersey course for all parts of the FRCA from the Primary Written. This has paid off as I somehow managed to pass all parts at the first attempt. I think a lot of this success is down to the Mersey Method and, of course, pure grit and determination. The Mersey mind-set gives you the confidence you need and a sense of perspective to go down to the Royal College and give the best performance you can on the day.’

– Final SOE Candidate June 2016

To see details of all of our courses please visit: www.msoa.org.uk or contact us at: enquiries@msoa.org.uk

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John Snow (1813–1858)

The bust of John Snow rests in the Council Chamber at the College.

John Snow attained Membership of the Royal College of Surgeons in 1836 and the Licentiate of the Society of Apothecaries two years later, leading to graduation from the University of London and the Doctorate of Medicine (MD) in 1844. His work provided opportunities to conduct research into the developing field of anaesthesia. He made major contributions to the study of the effects of ether and chloroform, designing apparatus for delivery of anaesthesia that uses principles still applied to this day.

One of Snow’s most well-known patients was Queen Victoria. Following his attendance at the births of Prince Leopold in 1853 and Princess Beatrice in 1857, the Queen’s positive comments on Snow’s administration of chloroform helped popularise the use of anaesthetic drugs in childbirth.