The Royal College of Surgeons of England is seeking a new Editor for its membership journal, the Bulletin. The appointment will take effect from November 2021, when the current Editor steps down. The Bulletin is published eight times a year in January, February, March, May, July, September, October and November, with a regular Trainees’ Bulletin published once a year.

The Bulletin publishes topical content, non-clinical research papers and feature articles; providing a forum for the debate of current issues of interest and/or contention within the profession. While the Bulletin keeps fellows, members and affiliates of RCS England informed of all RCS England activities, the features and research articles are of interest to those outside the College. We also have regular columns covering, technology, law and public policy as well as editorials and the view from the RCS England President.

The Editorial Board is composed of experts from the surgical specialties, which we are looking to expand in the coming year.

The Editor has final responsibility for editorial decisions regarding all content in the journal, developing and implementing the strategic vision for the journal in conjunction with the Editor-in-Chief, Editorial Board and publishing team, promoting the journal to the surgical community and overseeing the peer review process.

Responsibilities of the Editor

- Select and appoint Editorial Board members to represent the surgical specialties adequately;
- Guide the strategic vision for the Bulletin in conjunction with the Editor-in-Chief, Editorial Board and publishing team; including types of manuscripts to publish, development of new content, special sections or issues, and the formulation of journal policies;
- Ensure that the content is relevant (topical and/or scientifically sound), accurate and reflects the goals and scope of the journal;
- Evaluate the scientific rigour, relevance & integrity of manuscripts and make final editorial decisions relative to journal content after consideration of reviewers’ and other Editors’ comments;
- Take responsibility for ensuring the integrity of the peer review process (timeliness, fairness, thoroughness and civility);
- Promote the journal to the surgical community through editorials, social media and presence at appropriate events;
- Actively support diversity, inclusion and equity in the journal, publishing and the surgical profession;
- Handle issues regarding integrity of research and publishing, including misconduct and unethical or questionable practice.

Characteristics and Skills

- Proven experience of editing a journal at national and/or international level;
- Ability to create, communicate and lead a strategic vision for the journal;
- An awareness of current issues and trends in medical publishing;
- Ability to embrace innovative technologies and new ways of working;
- Strong leader and team member, with the ability to maintain motivation of the Editorial Board;
- Enthusiastic advocate, seeking opportunities to attract new submissions and promote the journal;
- Clear, effective communicator in managing relationships with a variety of people across the publishing process;
- Experience of working in an NHS hospital as a consultant surgeon;
- A fellow of the Royal College of Surgeons of England.

Application Process

Those who are interested may apply for this position by submitting:

- A full CV
- Covering letter of no more than 2 pages, outlining your vision for the journal and your suitability for the role.

Applications to be submitted by 9 am on Monday 27 September 2021.
They should be emailed to Michelle Jones, RCS England Head of Publishing at mjones@rcseng.ac.uk.

Those shortlisted will be required to attend a virtual meeting in the week commencing Monday 6 October 2021.
In this issue of the *Bulletin*, we discuss sexual harassment, work-life balance and celebrate 30 years of Women in Surgery.
The future of surgery is bright

Our Guest Editor celebrates 30 years of WinS and looks to the future of the profession.

Rebecca Grossman, MRC Clinical Research Training Fellow and RCS England WinS Member @rebgross

I n a recent interview, Professor Dame Sarah Gilbert, the vaccinologist who co-developed the Oxford–AstraZeneca COVID-19 vaccine, responded to a question about role models with the comment: ‘Science isn’t about people. I didn’t have time for heroes. I was interested in doing the science.’ I disagree with this premise. Science (including the science of surgery) is very much about people, not only in how it affects their daily lives but also in how it inspires them. You can only become interested in science if it is communicated to you. As you can see from the article on mentoring written by two final year medical students, role models have a deep impact on our more junior colleagues.

It was an honour to be invited to guest edit this special issue of the Bulletin celebrating the 30th anniversary of the Women in Surgery (WinS) forum. It is as I approach the later stages of my surgical training that I see with greater clarity that we truly stand on the shoulders of giants and this is reflected in the collection of articles in this issue.

Women have always excelled in their roles in healthcare despite being unappreciated (and to a certain degree, unrecognised as fully autonomous people) for far too long. The care shown by nurses such as Celia Liggins, as described in her interview by Chouari and Vig, is what allowed patients to recover and the careers of surgical legends such as Sir Archibald McIndoe to thrive.

The importance of such teamwork is further emphasised in Professor Averil Mansfield’s reflections of her career, in which she describes her colleagues as ‘people to be cherished both for their skills in their particular roles and for their support and friendship’.7 The first female professor of surgery in the UK, she was initially appointed as consultant vascular surgeon at the Royal Liverpool University Hospital in 1972; the Equal Pay Act had been signed only two years previously and women still required permission from men to obtain a loan or use a credit card.

Averil Mansfield became the founding chair of WinS (then known as Women in Surgical Training [WIST]) in 1991. WinS is now 30; a surgeon of this age would still most likely be a ‘junior doctor’. But when it was founded 30 years ago, marital rape was still legal. I point out the historical context of these milestones to show that although progress towards equality has been made, it is slow and incremental, and unfinished. Indeed, it was only this year that mothers’ names were granted equal status on marriage certificates. (Until now, only the fathers of the wedded couple were included on the document.)

Women’s professions are still undervalued, underscored by evidence in the gender pay gap report and phenomena such as pay decline with occupational feminisation. Women’s representation in surgical leadership roles is also woefully inadequate, as outlined by the Kennedy review, and in their harrowing article, Fleming and Fisher report that sexual harassment and assault continue to be ugly blights on the profession. Clearly, much work needs to be done to get our house in order.

As we go forwards into a future that looks strangely like the technological landscapes of the science fiction novels of the early 20th century, it is vital to ensure that the mistakes of the past are not replicated in the form of biased algorithms in technology. Diversity means recognising and embracing our differences. This requires us to adapt our frameworks, whether they be in the form of algorithms, professional culture or the nature of the care we provide for our patients.

Do not let your hearts be troubled as there is also cause for celebration and optimism. Professor Mansfield’s
Together, we’re changing the face of surgery.

Because it’s not just our patients who need saving

Environmental damage is the world’s leading cause of premature death. Yet a single operation can produce up to 814kg of CO₂. As surgeons, it is our responsibility to reduce our damaging impact on the environment and public health. That’s why the College is taking action on sustainability – from advocating for greener patient pathways to minimising single use equipment.

To find out more and to get involved, visit: rcseng.ac.uk/sustainability
Women in Surgery at 30: still lifting as we climb

Farah Bhatti reflects on the last 30 years of WinS.

Farah Bhatti, Cardiac Surgeon, RCS England Council Member and Chair of Women in Surgery

‘And so, lifting as we climb, onward and upward we go, struggling and striving […] we knock at the bar of justice, asking an equal chance.’

Mary Church Terrell, 1898

In 1991, three unrelated events occurred: the world wide web was created at CERN, the Women in Surgical Training (WIST) network was launched at The Royal College of Surgeons of England (RCS England) and I was working at St Mary’s in London, studying for my primary FRCS examination. Having set my heart on being a cardiac surgeon, I felt that nothing would stop me – certainly not my sex. My mood was optimistic, and WIST provided both inspiration and visible proof that it could be done. Indeed, Averil Mansfield, who was the founding chair of WIST, was a ‘poster girl’ on my wall while I trained! I thought the war on inequality was already over.

For three decades, WIST (subsequently becoming known as Women in Surgery [WinS] in 2007) has lived up to its mission statement to encourage, enable and inspire women to fulfil their surgical potential. Focusing across all career grades (including medical students), WinS provides career support, practical guidance, national conferences, regional events, mentoring, role modelling, and above all, a safe environment for networking. It has been a pleasure to be part of the WinS story and lead us into the digital age, with Facebook, Twitter and Instagram allowing us to extend our reach to people of all backgrounds to inspire them to consider a career in surgery. The proportion of consultant surgeons in England who are women has risen from 3% to 13% in three decades¹ – an amazing 400% increase or a glacially slow advance? You decide.

Fast forward to 2021. Has ‘equality’ been achieved? Despite the Equal Pay Act in 1970, the 2020 Mend The Gap report shows us that the gender pay gap is alive and kicking in medicine, with surgery having the largest unadjusted basic pay gap at 24.4%.² The Equality Act 2010 prohibits discrimination on grounds of protected characteristics; nevertheless, in 2020, it was felt necessary to commission an independent review into the diversity of the professional leadership of RCS England.³ Led by Baroness Helena Kennedy QC, the review was said to make painful reading but I would suggest that that pain pales in comparison as that felt by the surgeons experiencing the behaviours described daily. I was, however, pleased to see that the WinS network and the Lady Estelle Wolfson Emerging Leaders Programme were felt to be particular strengths of the College.³ RCS England is now working on putting the 16 recommendations into action to be more inclusive, so please watch this space.

On the 30th anniversary of the founding of WinS, I would like to thank the members of the WinS forum for their efforts over the years, from that visionary first committee to our current team. I am also grateful to the surgeons up and down the country who give so freely of their time to share the joys and realities of a career in surgery, including our male allies. We have all come a long way but there is much more to do. The WinS enthusiasm and dedication now needs to be matched by appropriate actions and reforms from the surgical institutions that hold the power to make real change happen.

Happy 30th birthday to everyone in our WinS network and thank you for having me as your chair for the last five years. Keep up the good work! #LiftAsYouClimb

REFERENCES

Power and influence

We must use our voice to stand up for the surgical community.

Neil Mortensen, RCS England President @mortensen_neil

I learnt a tough lesson at the end of July. I had agreed the text of a press release on the views of The Royal College of Surgeons of England (RCS England) with regard to the independent NHS pay review body’s recommendations. The releases have to be timely, usually within 24 hours of a news story developing. There are many requests for a College view on a whole range of subjects. We send out dozens of press releases each week (many of them at very short notice) and it is often difficult to have a big discussion over each one before they go out. The abridged version, which was posted on Twitter, and our weekly email did not go down well. It is fair to say, however, that the full text was generally welcome.

I called an emergency meeting of Council on Microsoft Teams to let all my colleagues talk it through. We agreed that the big issues obviously needed to be discussed by Council but that the Vice-Presidents and senior RCS England staff should have the opportunity to see and agree most of the rest of the releases. They ordinarily do so in any case although with anything urgent, there could be a two or three-hour deadline for comments. When I was first a Vice-President, we had an officers’ meeting once a month but at present, we meet weekly and the current affairs of surgery are updated all the time. Being President is such a different job now, with digital communication and social media to master, and being available at short notice for press interviews. The pace of the news has been accelerated by the COVID-19 pandemic. It is sometimes breathtaking.

This all raises the question: why bother? You have told us in answer to our membership surveys that you want RCS England to be visible and influential. It is one thing to be visible (and by all the media analytics, we are at the top of the medical class) but it is another to be influential. How do we know this is having any effect? Even more problematic: what are the issues we should and should not try to influence? Clearly, surgical training and recovery of elective surgery have priority right now.

The College has moved in the last five years from firmly staying away from pay and conditions. We admit we misread the junior doctors’ strike and have since been much clearer in our views on the pensions issue. If the British Medical Association calls a consultant strike, there will need to be another emergency meeting of Council. Just around the corner are the debates over assisted dying and sustainable surgery.

Our voice (if I can call it that) reaches our patients, the general public, the print media, TV and social media but also leaders of the NHS, policy makers and ministers, and of course our colleagues. If we say nothing, we don’t exist. However, we also have to be so careful that we say the right thing.

One of the leaders of the social media revolution and the founder of Facebook, Mark Zuckerberg, said: ‘People influence people. Nothing influences people more than a recommendation from a trusted friend. A trusted referral influences people more than the best broadcast message.’ This was the basis for his extraordinary platform and fortune.

I have found out that RCS England is a trusted voice out there, more trusted than the politicians or their advisors. We have limited or soft power but lots of influence. These last couple of weeks have been busy. I have been part of the NHS interview panel for the national clinical director of elective care recovery and will be meeting the new health secretary later this week. I am trying hard to be a good influence, a trusted friend.

Our voice (if I can call it that) reaches our patients, the general public, the print media, TV and social media but also leaders of the NHS, policy makers and ministers, and of course our colleagues. If we say nothing, we don’t exist.
Run for us and support our Surgical Research Fund

Last chance to register for 2021’s final running event in support of RCS England. Running not only helps you to improve your fitness, but the money you raise will help us maintain and advance surgical care for patients through our state of the art training and pioneering research. We have 3 places left in the Great South Run, a flat route in which you can take in the historic dockyard and picturesque seafront as you go, so please contact us for more information or to sign up to the event below.

• **Great South Run** (10 miles)
  - Sunday 17 October

Please email fundraising@rcseng.ac.uk to secure your place. Dates are subject to change under current COVID-19 measures. Places allocated on a first come first serve basis.

RCS England Ambassador Scheme

Are you a Core Surgical Trainee looking for more personal and professional development opportunities? We’re piloting a brand new ambassador scheme in four regions across the UK. Members, including affiliate members, based in the North West, Yorkshire & the Humber, the East of England and London will be able to apply for this exciting new programme from September 2021.

This is a unique opportunity to gain leadership experience and engage with College activities – helping you to prepare for future roles and interviews such as specialty selection. If you are a Core Surgical Trainee, or in an equivalent run-through programme, please email us to find out how you can get involved at: OutreachNorth@rcseng.ac.uk. The scheme will launch with its first cohort of ambassadors in January 2022. We look forward to hearing from you!

Call for submissions: The Theatre podcast series

‘The Theatre’ is now accepting proposals for podcast episodes on surgery and surgical training. Submissions should have appeal for a broad range of surgeons and other health professionals, and may be for one-off episodes or multi-part series. We are particularly interested in podcasts covering issues relating to Diversity & Inclusion, as well as those with a focus on learning and soft skills, though other proposals will be considered.

To submit, please send a 100-300 word proposal to podcasts@rcseng.ac.uk outlining your idea, who would be involved and what you hope listeners will get out of the podcast. If selected, RCSEng will work with you to develop and produce the podcast, which will then be released under the ‘Theatre’ banner on the College website and other podcast platforms.

Call for Participation: Parents in Surgery

Following the release of the Kennedy report we are seeking individuals to support us with progressing the Parents in Surgery recommendation. We are about to embark on a research and exploration phase and therefore are keen to speak to individuals that can help us gain an insight and better understanding to the pressures, sacrifices & barriers of becoming a Parent in Surgery. To help with this phase of research, or for more information, please email Rebecca at Rmartin@RCSeng.ac.uk

Lady Estelle Wolfson Emerging Leaders Fellowship

We will be announcing application details for the 2022 Lady Estelle Wolfson Emerging Leaders Fellowship at this year’s Women in Surgery conference on Friday 10 September. The programme aims to encourage women to become familiar with, and subsequently apply for, various leadership roles within the surgical and healthcare profession including The Royal College of Surgeons of England.

We will be targeting ST7/ST8 trainees, newly appointed consultants and SAS doctors who are fellows or members of the College. We hope to be able to identify those for whom our support would really make an impact to their career development and give them opportunities and exposure they may not otherwise be able to access.

The fellowship has recently been redeveloped based upon evaluations from previous delegates and now provides a programme of learning and support, along with access to a network of mentors from inside and outside the surgical profession including previous participants.

WinS/IWD Podcast: Listen now

Earlier this year we presented a panel discussion on the changing face of the surgical profession. Presented by Anthea Davy, consultant orthopaedic and hand surgeon, Stella Vig, consultant vascular
EVENTS

Upcoming webinars and events

We have developed a series of events to support our members, to keep you up-to-date with the profession, give you the opportunity to network with and learn from colleagues, and provide you with the advice you need.

Upcoming webinars and conferences:
- Gender-diverse patient webinar
  7 September 2021, 6pm-7pm
- Celebrating 30 years of Women in Surgery conference
  10 September 2021, 9am-5.30pm
- The surgical ambulatory emergency care network webinar
  14 September 2021, 6pm-7pm
- Future Surgery Show
  9-11 November 2021, ExCeL London

For information and updates, please visit: www.rcseng.ac.uk/news-and-events/events.

Bytes

What's going online?

Most-read articles last month

- Why is there a shortage of doctors in the UK?
  - M Taylor
  - 843 views

- A stressful job: are surgeons psychopaths?
  - J Pegrum, O Pearce
  - 535 views

- Are single use items the biggest scam of the century?
  - SA McNally, V Pegna
  - 507 views

- Saints and sinner: Robert Liston
  - B Thomas
  - 267 views

- Will the machines take over surgery?
  - A Sayburn
  - 265 views

In numbers

8.1%

Of survey respondents reported experiencing sexual assault at work. Other experiences reported were unwanted flirtations (56%), offensive jokes (59%), and personal/intimate questions about their private life (52%). Page 282
The last week of term in the Palace of Westminster always produces a flurry of activity, also known (to West Wing aficionados) as ‘taking out the trash day’. As a measure of this, the day before the House of Commons rose for its six-week summer recess this year, the UK government issued 15 written statements in addition to a vast array of other last minute business in both Houses. The Welsh Parliament and Northern Ireland Assembly have also risen until September.

In this end of term excitement, it would be easy to overlook an important milestone in the current legislative calendar: the second reading of the health and care bill. This bill is the UK government’s first major piece of primary legislation on health and care since the controversial Health and Social Care Act of 2012. It is intended to reform the delivery of health services, and to encourage greater health and social care integration in England.

The government has been wary of health reform, with Number 10 said to still bear the scars of the Lansley reforms introduced by the previous health bill nine years ago. Indeed, in order to avoid another bruising political encounter, the government is considered to have consulted widely on key elements of the bill prior to its introduction to the House of Commons.

On the face of it, the integrated care system provisions in the bill are regarded to be relatively uncontroversial. With integrated care systems already underway in many areas, the government has outlined that putting them on a statutory footing reflects what is already happening on the ground.

Although it may be amended during its legislative passage, there are elements of the bill that are likely to be the focus of political debate and scrutiny as the bill progresses. Political disquiet seems to be focusing on those elements of the bill relating to powers for the health secretary to direct NHS England in its activities and also to intervene in service reconfigurations. There has been criticism of these provisions in the bill as they are seen by some as a power grab by the Department of Health and Social Care and Downing Street.

There are also mixed views about the implications of the bill in terms of potential changes to competition rules and what this might mean for the level of private sector involvement in the NHS. While some have welcomed the bill’s removal of ‘cumbersome’ competition rules, there has been political opposition to this part of the bill with warnings that it could allow contracts to be awarded to private healthcare providers without proper scrutiny. Furthermore, arguably, the bill does not address some of the biggest challenges facing the NHS, including the record number of people waiting for treatment across the UK, pressures on the workforce and much overdue social care reform.

Although the UK government can ensure a roughly 80 strong majority in the House of Commons to make sure the bill goes through, it cannot ensure the same majority in the House of Lords and the bill’s passage there may be more interesting. There is a timetable for ensuring that integrated care systems can take on statutory responsibilities by April 2022. However, this has already been described as ‘incredibly tight’. The government is therefore facing pressure to ensure the hasty passage of the bill.

As a result, Number 10 is expected to push for a swift legislative timetable for the remaining stages of the bill when the House of Commons returns in September. The UK government will be hoping that means a smooth passage for the bill but its political opponents may have different ideas. With this being the first major piece of health legislation in nine years, it is likely to be subject to detailed and rigorous scrutiny by politicians in both Houses. Whatever your perspective on the bill, what is clear is that the UK government could be in for a bumpy ride this autumn.
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References:

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Visit our website: www.atosmedical.co.uk
always thought I was well informed about workplace discrimination, especially through being a female surgeon in a male dominated field and my work on the Women in Surgery committee. However, I recently learnt that what I knew was merely the tip of the iceberg.

In March 2021, The Royal College of Surgeons of England (RCS England) published the report of the independent review on diversity and inclusion for the College, led by Baroness Helena Kennedy QC. Being a member of the review panel was the most eye opening and humbling experience of my life so far. I heard first-hand accounts from people who had witnessed or been subjected to career-long discrimination.

What struck me most was how subtle some of this discrimination appeared to be to outsiders, when it was dramatically obvious to those on the receiving end. The daily microaggressions that people endured were hard to hear. (A microaggression is defined in the report as ‘a behaviour or action – whether accidentally or purposefully – that subtly undermines someone’s identity by playing into the stereotypes or historic biases about social groups’.)

Many people in positions of power believe there is true meritocracy in the surgical profession; they express scepticism on the use of quotas or argue against making accommodations for applicants from disadvantaged backgrounds, insisting instead that career progression is based on skill and merit. To this I would maintain that there is no such thing as meritocracy if the playing field on which we all start is not level. Microaggressions, discrimination and misplaced career advice informed by prejudice can all have an impact on career progression. One person quoted in the report stated: ‘In one of my first times in theatre the trainee said to me “how cute, you want to be a female surgeon”… I felt really patronised...’

Some doctors clearly face additional hurdles in their careers that have nothing to do with skill and merit. The Independent Review into Gender Pay Gaps in Medicine by Professor Dame Jane Dacre and Professor Carol Woodhams has shown that even if women take no time out, work full time, do not have children, and are matched like for like with men across hours worked, grade, experience and specialty, they still earn less than their male counterparts. This further supports the argument that the playing field is not level. The report also highlighted that Black and Indian doctors earn less and progress less quickly than their White peers while the Kennedy review reported that White UK F2 applicants are more likely to be deemed appointable to core surgical training than Black and minority ethnicity applicants.

While carrying out the Kennedy review, the panel rapidly realised that a lack of diversity in leadership positions was having a negative impact across all sections of surgery. If individuals cannot see themselves (or people like themselves) in leadership roles, they may assume incorrectly that they do not belong in those roles. An important finding from the review was that medical students are less likely to apply (or are perhaps not adequately recruited) to a surgical training programme if they come from certain socioeconomic backgrounds. This resonated with me personally as I come from a single-parent, low-income background and I was in the minority applying for medical school, let alone for surgery.
Indeed, in 2019, the Sutton Trust found that only 6% of UK doctors were from working class backgrounds. Medical students and doctors in training can easily be dissuaded from applying for surgical training programmes if they think they are the ‘wrong’ sex or race, have the ‘wrong’ sexual preference, come from the ‘wrong’ background or even have the ‘wrong’ accent. None of these factors should stand in the way of becoming a surgeon but they nevertheless act as real barriers to a true meritocracy.

The Kennedy review highlighted this as one person explained: ‘I felt like I had to change my accent – I felt judged all the time – and I had to work so much harder – or I thought I did – just to prove I wasn’t “some kind of a thug” when I showed up in theatre.’ Another had concerns about the College’s inability to understand: ‘I would like to feel that the White male leaders of the College understand the problems that Black and female surgeons face, but I don’t think that they do, how can they?’

I am incredibly grateful to the people who spoke openly to the panel for highlighting the many extra hurdles over which some individuals must jump, which must seem insurmountable at times. Gathering evidence with this panel helped me to see that a lack of first-hand experience of direct racism, sexism or discrimination does not mean it is not happening. It is simply unacceptable to deny or belittle other people’s lived experiences of such challenges.

It is always worth remembering that if you are not in a minority demographic, you may not have true insight into the situations of harassment or microaggressions experienced by that demographic. Furthermore, those experiencing such situations may not feel able to speak up so they are often underreported. This is illustrated by another quote from the report: ‘One of the people who said the “N word” is a very senior boss; I can never do anything about that because I want a good job.’

I feel positive about the fact that the report was commissioned in the first place; it was a brave move by the President of RCS England, Professor Neil Mortensen, as it opened up the College and the surgeons it represents to national criticism, and put them under great scrutiny. That an independent review was commissioned and performed suggests there is an appetite for change even at the highest level.

The findings in this report are not unique to the members of RCS England. The people interviewed by the panel were from all parts of the UK and Ireland, and the narrative was the same everywhere. There are inherent issues of inequality and discrimination that form part of surgical culture across the UK and beyond. The other medical and surgical royal colleges must have similar challenges. The 16 recommendations in the Kennedy report should be embraced by all colleges and institutions. If we work together to change the culture of surgery and make it more inclusive, then the surgical community (and surgical patients) will all benefit.

RCS England did not hold back when releasing this report, and it is clearly committed to its responsibility and to its word to make the required changes. In the meantime, I will most certainly not be using the term meritocracy relating to surgery anymore, until we attain a more equitable playing field.

REFERENCES
Sexual assault in surgery: a painful truth

Uncomfortable conversations are necessary for a safe work environment.

S Fleming Orthopaedic Registrar
RA Fisher Core Surgical Trainee
1Royal London Hospital, Barts Health, London, UK
2Gloucestershire NHS Foundation Trust, Cheltenham, UK
Surgery and surgical training have a problem with sexual harassment, sexual assault and rape. It is an uncomfortable truth, but the truth nonetheless. These issues are present in all spaces, including workplaces, and broadly range from small infringements of personal space to overtly criminal activity. However, in surgery we have a specific issue: our community is small. This means that despite reporting abuse, a person may never be able to walk away from the experience or the community in which it happened.

To have honest and accurate conversations about sexual harassment, sexual assault or rape, we need to know what these terms mean. As there is often misunderstanding, the following definitions from UK law are important:

**Sexual harassment** is a form of unlawful discrimination under the Equality Act 2010. Sexual harassment is unwanted behaviour of a sexual nature.

To be sexual harassment, the unwanted behaviour must have either:

- violated someone's dignity, whether it was intended or not
- created a hostile environment for them, whether it was intended or not.

Sexual assault is when a person is coerced or physically forced to engage in sexual contact against their will, or when a person, male or female, touches another person sexually without their consent. Touching can be done with any part of the person with any part of their body or an object without that person's consent. A rape is when a person uses their penis without consent to penetrate the vagina, mouth, or anus of another person. Legally, a person without a penis cannot commit rape, but may be guilty of rape if they assist a perpetrator in an attack.

Now, having read those definitions, the authors ask you to re-read, ideally out loud, the opening paragraph of this article.

From these definitions it is clear that this is a broad range of behaviour, from unintentionally creating a hostile environment to sexual penetration. The milder end of the spectrum is often underestimated, underplayed and commonly excused: ‘everyday’ sexual harassment often involves ostensibly positive things like commenting on appearance. The defences of ‘but it’s a compliment!’ and ‘but she likes it!’ do not lessen the fact that, in the workplace, there are ways of paying a compliment that are acceptable, and ways that are very much not. Despite being positive remarks, they objectify the person rather than valuing them as a professional. Moreover, there are a variety of social reasons why ‘smile and say thank you’ is the easier thing to do than to speak up against unwelcome behaviours or attitudes.

Surgeons and trainees are unlikely to report sexual harassment; thus, to date, much of the information we have on this topic is anecdotal. Anonymous surveys have often revealed the extent of the problem. Recently, the Rouleaux Club (the trainee body for vascular surgery) released data from their national survey. Of 120 vascular trainees, and with a 60% response rate, 46% reported experiencing or witnessing bullying, undermining or harassment. This prompted trainees to share their experiences on social media.

The UK surgical community is just beginning to address these difficult conversations, but there is a great deal of global literature to support the fact that surgeons experience unacceptable behaviours in the workplace, both as trainees and non-trainees. In 2015, the Royal Australasian College of Surgeons commissioned a national survey of members, with 3516 individuals (47.8%) responding from all surgical specialties (81% male, 15% trainees). They found that harassment (19%), discrimination (18%) or sexual harassment (7%) all featured. Some 12% of trainees had experienced sexual harassment; the rate was strongly gendered (30% of women had experienced sexual harassment) and 56.1% had not reported. When respondents were asked if ‘they have ever been the recipient of sexual harassment behaviours in the workplace’, there was an 8.1% rate of sexual assault and a 1.1% rate of rape (from a list of 10

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The standard we walk past is the standard we accept, and many of us hear and see behaviours every day which we know to be unacceptable.
options provided). However, the highest frequency of behaviours was sexually explicit or offensive jokes (59%), unwelcome sexual flirtations (56%), inappropriate physical contact (53%) and questions or insinuations about sexual or private life (52%).

Similar data have been reported in a Greek study, which found a 20% rate of sexual harassment. Colleagues in the United States have also conducted a variety of studies that echo these findings. In a large cross-sectional national survey (n = 7409) of general surgery trainees, sexual harassment was reported by 10.3% (19.9% of female trainees overall). Of those women that did report, the perpetrators were most frequently patients or patients’ families (31.2%) and consultant surgeons (30.9%), followed by trainees (15.4%) and nurses or staff (11.7%). The most commonly cited reasons for not reporting were believing that the action was harmless (62.1%), believing reporting would be a waste of time (47.7%), being busy (37.9%) or being uncertain whether they were experiencing sexual harassment (31.8%).

In 2017, the General Medical Council survey found that 2908 (5.5%) of doctors in training had witnessed or experienced bullying in their current post. The vast majority (2721 trainees) said they did not wish to report via the national survey because they did not think that reporting would make a difference (944 doctors), feared adverse consequences (852 doctors), didn’t think an issue was serious enough to report (613 doctors) or it had been reported locally (1505 doctors).

Reporting these incidents can lead to greater negative impact for the victim than the perpetrator, by being threatened with negative consequences for their career. Whether they choose to report or not, a victim’s career can be affected by their withdrawing from the work environment to avoid perpetrator or bystander colleagues.

For UK trainees, it is fair to say that the lack of major third-party employers outside of the NHS makes a negative impact on career progression a risk not worth taking.

The debate about whether there is a culture of sexual harassment, discrimination and sexual assault should end. Instead, harder conversations need to begin. To move forward, we require acceptance that this issue exists, and that each member of the surgical community has a duty to attempt to address it, whether they have personally witnessed or experienced these behaviours or not. It is not enough to not be complicit. As a community, we should all be anti-sexual harassment, anti-sexual assault and anti-rape.

We are proud of the tight-knit community in which we work and the tremendous efforts by individuals and organisations to make our workplace inclusive. However, we must remember that for victims of harassment, discrimination and abuse, the notion that ‘everyone knows everyone’ can turn a welcoming community into something that feels like a prison. Many fear their story becoming known. The dedication required to achieve a career in surgery means leaving the profession is often unthinkable, and this can lead to burnout, depression and suicide.

To move forward we need to normalise challenging these behaviours, whether this is at a departmental, local or national level. For trainees in particular, the significant power that trainers have over career progression can silence even the most confident voices. This will require the creation of psychological safety at every level and mechanisms to report inappropriate or illegal behaviours, so that surgeons no longer feel that reporting will not make a difference, and will not have a negative impact on their careers or mental health.

Reporting behaviour is a first step to institutional awareness and action, yet it is one of the greatest barriers, with unclear reporting options that make victims fear repercussions. In 2020 a survey, a group of US residents were asked how they would feel most comfortable reporting these issues, and 67% of residents chose methods that were anonymous, with the second and third most preferred options being departmental reporting and reporting to another resident.

Professional societies have a significant role in addressing this issue, by leading culture change, signposting reporting mechanisms and providing sanctuary to share experiences.

There is a role for senior leadership to set the tone and own the problem. In the New Zealand and Australia experience, a widely published apology by then President David Watters on YouTube was a critical turning point in the journey towards acceptance and ownership of the problem of bullying, discrimination and sexual harassment by surgeons. Equally, there is a role for bystander and upstander training. The standard we walk past is the standard we accept, and many of us hear and see behaviours every day which we know to be unacceptable.

The authors hope this paper is a call to action; that it sparks further uncomfortable conversations; that it begets an acceptance from the (mostly male) surgical community that this is not an attack, nor is this about blame. This is about how to move forward.
and to make things better and safer for all of us.

To make a safer workplace, every member of our community needs to refuse to tolerate these behaviours. This means taking action in the form of an informal conversation, an awareness intervention or, for the more egregious behaviours, immediate disciplinary action. We should be clear: an unacceptable joke may mandate a ‘cup of coffee conversation’, a pattern might mean remedial training, but sexual assault or rape are crimes. They should and must be treated as such.

ACKNOWLEDGMENTS
The authors would like to thank the multitude of humans who advised, guided and shared their experiences to help form this piece. Without their candour, bravery and trust, it would not have been possible to write this. We acknowledge the victims who often remain unseen and unheard.

AUTHORSHIP
Simon Fleming (SF) was invited to write this paper as a visible and outspoken advocate for culture change in healthcare, with a particular focus on surgery. He has written and spoken before on this topic and experienced first-hand the public discomfort with discussing how these issues are managed in the surgical workplace.

Rebecca Fisher joined the paper as a junior trainee with an academic interest in the experiences of women in surgery. She has not experienced the severe end of this spectrum but has counselled friends and colleagues who have. As a visible member of the medical Twitter community, she has previously been asked to anonymously report on cases of sexual assault where the victim felt unable to speak out themselves. Because of the sensitive nature of sexual harassment and assault in our surgical community, she chose not to speak out about these cases, due to concern of retribution.

One author of this paper (SF) reached out to over 20 women in surgery who have, in the past, shared with him via social media experiences of sexual harassment, discrimination, sexual assault and rape. Not a single one was willing to co-author, even with the guarantee of anonymity.

REFERENCES
WiST and WinS across a surgical career

RCS England Council member Scarlett McNally describes her experience of WinS over the last 30 years.

SA McNally¹ Consultant Orthopaedic Surgeon
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Over the past three decades, my career has been nudged by WIST (Women in Surgical Training), later changed to WinS (Women in Surgery) and I hope I have helped shape WiST/WinS intermittently too. I had just graduated as a doctor and finished my year as a house officer when WiST was created in 1991. The government had given a small amount of money to help the Royal College of Surgeons of England (RCS England) to set up WiST (Box 1). Although many people have questioned my career choice, most surgeons soon knew about WiST and had something positive to say rather than being dismissive. It is difficult to unravel the multiple changes—in society, expectations and surgical practice. At the time, there had just been a female prime minister, Margaret Thatcher, and I sensed that people felt the battle for equality was over. Yet across many professions, a few women have always succeeded. We have only recently acknowledged the sacrifices and attrition of other excellent candidates. Cohort studies report that, in surgery, only half of women had children compared with men or other specialties, suggesting that women were choosing between career and parenthood. I followed the post-war generation. Strong heroic individualism was expected. Long hours prevented surgeons in training from having much work–life balance, yet this also meant acquisition of skills and recognition of your role from staff and patients. When I became a consultant in 2002, someone suggested that ‘no-one checks your homework’. With new concepts of audit, Getting It Right First Time (GIRFT) and clinical governance, all that changed. As surgical outcomes opened up to scrutiny, so did decision making and team working. At that time, lots of informal advice was given in the men’s theatre changing rooms. With WinS, I have always had a tribe of people with whom to feel connected or exchange ideas (Figure 1). I applied and was appointed to the WiST committee and then the Opportunities in Surgery (OiS) Committee at RCS England in the early 2000s. As more women moved beyond training, WIST no longer seemed an appropriate title and we became WinS. This was a welcome new direction. There has been a good working relationship with the Medical Women’s Federation, and we have a similar ethos of support, respect, clarity and role models.

I should probably credit my WinS credentials with my election to the Council of RCS England in 2011. I was the only woman standing and people were ready for a change. I was only the ninth woman elected to that role. I was appointed Chair of OiS and there was overlap between WinS, and medical student and SAS committees that OiS oversaw. I was briefly interim chair of WinS. We attempted to make clear what the requirements to be a surgeon were. Once you have passed the rigorous surgical exams, you should be in our club of surgeons.

Equality and diversity training in the NHS has changed little in 30 years. The training for selection panels is focused on equality legislation, ensuring that the organisation will not be sued if someone mentions a difference. Diversity could be argued as the opposite of equality. For diversity, one has to recognise the difference and, in a one-to-one discussion, listen and identify how to ensure that this unique person can deliver as well as they possibly can. Many women never get that one-to-one honesty.

There is a tension between expecting an individual to fit in and changing the culture. Women are sometimes advised to ‘lean in’. There is also a tension around stereotyping. Data are useful. One woman may not feel discriminated against, yet women in general are less likely to put themselves forward to do an operation. I wrote two papers analysing numbers of women applying to surgery. The first found a correlation between competitiveness of the specialty and proportion of female applicants. The question of whether women wanted to apply but were put off was not answered. The next paper analysed application to surgical

Box 1 Hansard parliamentary report 22 July 1991 on the start of Women in Surgical Training (WIST)

Mrs Virginia Bottomley. Earlier this year I launched the ‘Women in the NHS’ initiative to improve recruitment and retention of women staff within the National Health Service. A seminar was held on 25 June which considered a report from the Office of Public Management, commissioned by the NHS management executive, identifying the relevant issues. This concluded with an agenda for local action which will be followed up at three conferences in the autumn. Each regional chairman has nominated a non-executive member to take forward this work.

A retainer scheme has been introduced to allow staff to interrupt their careers for up to five years for domestic or other reasons, and includes refresher schemes, temporary employment and training courses. Health authorities are also encouraged to provide child care facilities which may include workplace nurseries, child care vouchers and holiday playschemes, as required locally.

In January, a report of a joint working party on women doctors and their careers was published. This made a number of practical suggestions to promote equal opportunities for women doctors in the NHS. In response, the Department is reconvening a working party on part-time training to look at the current arrangements for senior house officers and senior registrars. One and a half million pounds has been provided to fund part-time training posts and to set up a new scheme, WIST – Women in Surgical Training — to improve the representation of women in the higher grades of the surgical specialties. We have also issued a code of good practice to promote equality of opportunity in the recruitment and selection of doctors and dentists.

The recent agreement on junior doctors’ hours has for the first time set an upper limit to the number of hours that can be worked—maximum hours per week and continuous spells of duty—and should reduce the difficulties of combining family responsibilities with a medical career.

specialties and found 30% of applicants to core surgical training were female, suggesting that women were keen to do surgery. It also found that women were statistically significantly more likely to be appointed and a large drop-off between those applying to core and those applying to higher training. This allowed complacency as it demonstrated no discrimination against women at the point of selection, but no impetus to change the system to be more welcoming. Qualitative research shows that women have a different, more off-putting experience than men.

Mentoring has been suggested as essential for progression. We wrote a guide of clear expectations. Yet the official model of mentoring is allowing the mentee to lead, whereas patronage and advice may often be more useful. WinS ran a successful pyramid campaign of mentoring (one consultant mentored two surgical registrars, who each mentored two surgeons in core training, who each mentored two in foundation years, who each mentored two medical students). We sponsored ‘pizza nights’ in surgeons’ own hospitals or universities, to include a short slide show of information and then networking between grades, creating near-peer role models and sharing possibilities.

As the College’s first female President, Clare Marx felt that senior women encountered blocks to progression and WinS increased its focus on this area. Bypassing those blocks requires management training (eg finance, human resources, governance) as well as leadership skills. It also requires listening at each point to what the next role needs, to adapt oneself to each opportunity, and asking for information, even formalising a request (such as making an appointment with someone’s secretary) but not necessarily taking advice given. It is not appropriate for just the women to change. Trainers need to know how to interact, and organisations and training systems need to understand difference and diversity.

The most impactful decision I made was not to attend an event in London about women in different professions. I had a full operating list. I insisted that this was important enough to send a vice president. John Getty attended, was converted to the cause and was instantly

There is a tension between expecting an individual to fit in and changing the culture.
helpful. Other College Council members seemed unexpectedly understanding of the issues when their own daughters struggled with promotions. It increasingly feels that we need men as allies and that the College should change from within and should not expect women to lean in.

In 2015, Australian surgery was rocked by allegations of sexism, racism and sexual harassment. Half of surgical trainees reported having been bullied. WinS worked with the Royal Australasian College of Surgeons (RACS), who launched their ‘Operate with respect’ campaign (www.surgeons.org/respect) in 2016 at the Congress in Brisbane, as we launched ‘Avoiding unconscious bias – a guide for surgeons’. This felt like a breakthrough. Before this, personality was felt to be set. The key seemed to be that surgeons did not realise how they were perceived. Many surgeons did not mean to cause harm or upset. Many were poor at dealing with upset. Many were poor at dealing with bullying. Bullying is defined by how the victim feels. It is not just done by ‘bad apples’. The perfectionism and presenteeism that surgeons value makes bullying more likely to occur by mistake. However, behaviour can be taught. It is possible to retrain surgeons to set a minimum standard, to ensure that it is met and to give feedback on the task, not the person. Setting clear expectations is key. Everyone should have a minimum understanding of legal requirements, some stock phrases of welcome and an awareness of where practical tips can be found.

Over the years, WinS has been involved with events, networking (Figure 2), newsletters, mentoring, advice leaflets (on pregnancy, parenthood, mentoring, learning in operating theatres), highlighting clear standards, sharing resources and slides (e.g. for pizza nights), websites, working with medical students, undertaking research about fitting in, data collection and running surveys.

Practicalities are needed as well as rhetoric. WinS has authored guides to pregnancy as a surgeon and on learning in the operating theatre to empower new staff and students. We have worked with companies to help them to produce cloth theatre caps embroidered with name and role, with options for women who wear a hijab or have Afro hair. This focus on making every moment as good as it can be helps staff development. My own experience of adapting opportunities for a male registrar who rotated through my firm included finding a box of size 9 gloves and identifying an easily accessible place to keep it. Paying attention to diversity means that individuals feel included.

Figure 3 Flyer to encourage all surgeons and surgical teams to support students and future surgeons.

Supporting students, current and future surgeons

The RCS is committed to supporting medical students, current and future surgeons and members of the surgical care team. We have put together this summary of our practical support, advice and resources to help you. We appreciate greatly the time and enthusiasm given by our fellows and members to supporting others.

rcseng.ac.uk/study

- Learning in operating theatres should be sent to students and theatre staff
- National undergraduate surgical curriculum
- Guides on avoiding unconscious bias, less than full–time (LTFT) training and parenthood

rcseng.ac.uk/careers

- Guides on consent, mentoring, meetings and team-working
- We provide sponsorship and support for medical student surgical societies
- Individual careers advice for all career stages
- Regional support and dedicated careers contacts
- Courses for all specialties and career stages
- Events, including webinars and workshops for all career stages

Actions

Support all potential including medical students and foundation doctors

- Actively involve all medical students – all doctors need an understanding of surgery
- Encourage all medical students to scrub – the key points for them are:
  - To practice in advance, say if you will move and hold any instrument with the tension you are given
  - Talk about how amazing it is to be a surgeon and that competition for surgical training has reduced
  - Emphasise that all specialties have a maximum 48 hour week and LTFT training is possible
  - Remind students that some parts of an operation can be tense – avoid distractions at critical times
  - All staff should remember they are role models for good behaviour to students and colleagues
- Contact us to get involved with RCS faculty, examining and other roles

rcseng.ac.uk/join

- Fellows and members can enjoy full benefits of RCS England
- Roles within the surgical care team can now join the RCS as associate members
- Students and pre-MRCS trainees can join as affiliate members for just £15 per year
- Women in Surgery is free to join and includes networking, events and guidance
- SAS doctors are encouraged to join the RCS as fellows and members

rcseng.ac.uk careers@rcseng.ac.uk
Like other forms of change, such as smoking bans, wearing seatbelts or getting a cycle path along Eastbourne seafront, we can no longer expect one group to make the change. Culture can change rapidly but needs decision makers and organisations to see the detail required to achieve the goal. Over the years, WinS has managed to survive different expectations. It needs to be a support and advice network for women surgeons but also to normalise surgery being accessible to everyone. It needs to advocate simultaneously for women being different or having a different experience and for everyone to be valued in the same way.

The report into diversity at the College and within surgery shows there is a huge amount of work still to do. The gender pay gap report singles out surgery as having the greatest discrepancies. Reports from the British Medical Association, the British Orthopaedic Association and others show that sexism and microaggressions are common and that every organisation needs to focus on respect at each moment. There are particular problems with surgical training, which is lengthy and often coincides with early parenthood, with additional difficulties of commuting, exams and covering rotas. We should push for better training structures for what is a short but essential time in a career. We should also demand shared parental leave to normalise men or the second parent being involved. This would help to ensure that non-work time and efficient use of work time are both valued.

Many surgeons (consultants, SAS, registrars and others) are inadvertently off-putting to medical students, Foundation doctors and other potential future surgeons. Every surgeon should understand their role in supporting future surgeons. In obstetrics and gynaecology, the specialty became diverse very rapidly when it was less competitive. It is likely that sought-after specialties have not seen a need to change or adjust to be more welcoming, to the detriment of the specialties, as they are not recruiting from the widest pool of applicants and may thus be missing out on the best candidates. The under-representation of women in surgery needs all our members and fellows of any gender to help, to get the best possible surgical workforce for our patients. All surgeons should celebrate that every specialty is a maximum of 48 hours of work per week and that less than full time is possible.

A flyer highlighting these messages (Figure 3) for all team members to use is available at www.rcseng.ac.uk/study.

REFERENCES

ARE YOU CUT OUT FOR IT?

Would you like to enhance your application for higher surgical training?

Are you prepared to go head-to-head with your colleagues and put your skills and knowledge of surgical principles to the test?

Our national surgical skills competition is back, and in 2021/2022 qualifying ST3 trainees can compete alongside CT2/ST2s! You must be an affiliate or member of RCS England.

We are holding heats in your region to find the highest performing teams. Find out when your regional heat is happening and get in touch with your local organiser: www.rcseng.ac.uk/skillscomp

Champions from each heat will be invited to the grand final in London. The overall winners will receive the Louis Solomon Knights Award for Surgical Skills and a share of £1,500 prize money.

Organiser opportunities
We are also looking for organisers to help coordinate the heats and faculty. Organisers can be any career grade and belong to any surgical specialty, but they must be a member or affiliate member of RCS England. Contact OutreachSouth@rcseng.ac.uk to get involved.
Working with ‘The Boss’, Sir Archibald McIndoe – an interview with Celia Liggins

Holistic nursing in the Second World War.
The contribution of women in the surgical team cannot be overestimated, from nursing staff to surgeons. This article recounts the memories of Celia Liggins, now 93 years old, who served as a British Red Cross war nurse in the 1940s. She worked with Sir Archibald McIndoe, consultant plastic surgeon to the Royal Air Force, who established the maxillofacial unit at the Queen Victoria Hospital (QVH), East Grinstead, in the late 1930s.

Celia was the daughter of a live-in maid and a head waiter of a local hotel in Royal Tunbridge Wells. Celia’s father lost his job during the economic downturn and in order to support his pregnant wife, he became a labourer. Tragically, he died in a work accident and Celia’s mother, now a widow, gave birth to Celia on Christmas Eve. Being a single mother in these times was tough and Celia was adopted by her aunt, losing contact with her mother shortly afterwards. Celia recalls her childhood as a difficult upbringing where she never felt quite wanted and explained: ‘All I ever got growing up was: “Sit, stand, do as you’re told!” Not a single kiss or hug… nothing.’

Leaving school at the age of 14 during the Second World War, Celia became a live-in maid herself but really wanted to be a nurse, even though this was a great challenge. The following year, she wrote to a national women’s magazine describing her aspirations to be a nurse. To her surprise, the magazine replied. They had forwarded her letter to the charitable Waifs and Strays Society (known today as the Children’s Society), which was willing to offer her a post as a nanny for fostered children. This post resonated with Celia given her childhood and provided her with a nanny certification.

Fortuitously, a recruiter for the Red Cross visited the nursery and asked: ‘You don’t want to be a nanny to some rich body, do you?’ Celia replied to this with total conviction: ‘No. You know what I want to be? A nurse!’ The recruiter contacted the matron at the QVH, going back to Celia stating: ‘You’re in.’ When asked what drove the desire to become a nurse, Celia candidly replies: ‘Because you have the opportunity to give love to people and I hadn’t had much love in my life at that point, yet I had so much to give. That’s the greatest thing you can give someone.’

Initially a cottage hospital (founded in 1863), the QVH transformed into a modern hospital in 1936. During the Second World War, it was established as one of four specialist emergency services units in the country dealing with burns casualties. Wards I, II and III treated patients with dental/jaw injuries, civilians injured during London air raids and the most severely burnt service aircrew. In 1939, Mr Archibald McIndoe arrived to run the new unit. McIndoe went on to establish a pioneering unit, developing surgical techniques that underpin modern burns treatments globally as well as holistic and psychosocial rehabilitation programmes.

Working on a general ward at the QVH, Celia recalls the day she was sent to work on Ward III. Celia giggled while recounting how at 17 years of age and with limited experience, she could not understand why she had been chosen. It was not until recently, when she read that ‘McIndoe would only have pretty girls working for him as it would boost the morale of the men [patients]’, that it dawned on her. ‘That must have been it!’

Celia will never forget her first patient or how the sudden realisation of the enormity of the care and attention they required sunk in. This young airman was gunned down at sea and as the plane plummetted, flames spread from the fuel tank located at the front of the plane, just in front of the cockpit. The burns to his face left him blinded and he suffered significant burns to his hands, which were firmly charred to the steering wheel.

She recalls: ‘I had to guide him by arm to the toilet and told him “give us a shout when you’re done” as I waited outside. How did I think he could manage – can’t see and no hands! My face was as red as a beetroot!’ The ward sister walked past, insisting: ‘Help the poor man, and then go and sort out the bedding in the bay. You’ll do far worse things than that on this ward!’

Celia had to learn rapidly to carry out nursing duties, taking care of her patients’ every need and providing a holistic approach to their care. This nursing was labour intensive and the QVH had one
"If you remain observant throughout your career, you will excel."

of the highest nurse-to-patient ratios in the country. Despite this, Celia was kept busy as the workload suddenly increased for everyone. In the latter half of 1940, the wards were filled with servicemen injured at Dunkirk and airmen burnt during the Battle of Britain. Celia spent very little time in the on-site nursing quarters except to get a couple of hours sleep every now and then.

She reports many experiences on Ward III: frequent observations to ensure a tube pedicle remained viable following novel reconstruction, covering wounds in dressings soaked in petroleum jelly and coming to the ward when off duty to listen to music or chat with the patients. Celia also recalls counselling the men’s distraught wives and families. She empathised with the wives: ‘It must not have been easy coming away from them [patients].’ His patients couldn’t help but be in total admiration of the ‘grand man’, who insisted that ‘in the back’ the work, be that physiotherapy, diet or mental. Otherwise, the work you’ve done operating on them will be for nothing.’

Celia spent the last year of the war at East Grinstead. Motivated to pursue a permanent post as a nurse, she started training at the Windsor Hospital. Shortly after starting, she met her husband, who had just finished service with the navy. They soon got married and had children, and Celia returned to working as a nurse in Windsor. Although she used the skillsets she had nurtured at the QVH, she never quite got the same stimulation or satisfaction with her work that she had experienced there.

An amazing woman, Celia offered us this final piece of advice: ‘Through your career, there are mistakes that will be made and ultimately, you need to identify and take ownership of them. Furthermore, always be vigilant and hyperaware, whether in theatre or on the ward. If you remain observant throughout your career, you will excel.

There are learning opportunities all around you but unless you’re looking for it, you won’t find them. And lastly, always follow up your patients after surgery, and ensure they remain motivated and are putting in the work, be that physiotherapy, diet or mental. Otherwise, the work you’ve done operating on them will be for nothing.’
From medical student to surgeon: the importance of mentoring

What impact can role models have?

CE Eichenauer Final Year Medical Student @drclaudiaeichen
TK Thornton Final Year Medical Student University College London, UK
As of 2020, only 13% of consultant surgeons in England were women. The number of female registrars may slowly be increasing but we are still a long way from 50% of consultants being female. This makes female consultant surgeons a relatively rare sight, particularly in the specialties of neurosurgery and orthopaedics. This discrepancy may deprive female medical students of valuable role models: ‘You cannot be what you cannot see.’

Mentoring may help to combat this disparity and encourage female medical students’ interest in surgery. During medical school, we have seen how vital surgical mentors are when considering surgery as a future career. The value of mentors in surgical training is recognised in the literature. Mentors have been found to reduce stress, increase confidence and wellbeing, and improve professional development. They can therefore provide valuable support for female medical students when entering the often daunting world of surgery.

**MEDICAL STUDENT EXPERIENCES**

As a medical student, it is easy to be influenced by the opinions of more experienced senior colleagues. However, female medical students appear to be disproportionately discouraged from pursuing a career in surgery by their seniors compared with their male peers. We conducted an anonymous online survey in May 2021 of University College London medical students, shared through social media. Participants were invited to report feedback they had received when they mentioned aspirations to be a surgeon. Of the 10+ students who participated, comments they had previously received included:

- ‘I’d never want a woman to operate on me. She wouldn’t be able to handle the pressure.’
- ‘You’re so cute for thinking that you want to do surgery.’
- ‘You won’t be able to be both a good surgeon and a good mother. What’s wrong with becoming a GP?’

Such comments are upsetting and can deter women from pursuing a surgical career (and some examples could even be considered sexual harassment). Conversely, mentors who encourage and inspire their students (regardless of the sex of the mentor or the student) are a great source of help and motivation.

**OUR EXPERIENCE**

From personal experience, once motivation is established, it is hard to deter. Surgery is a fantastic career; the practical aspect and the rapid impact on patients is very rewarding. We have been fortunate to meet amazing surgeon role models, who have encouraged us and told us early on not to listen to discouraging comments. We were made part of the team, introduced to other members, given tasks and taken aside to be taught.

Nevertheless, there have also been experiences in theatre where it felt as though we had to prove our interest in surgery or explain our presence to be allowed to scrub. This less welcoming barrier may deter some students from future surgical aspirations. Surgery is a beautiful specialty and we need to make sure there are future generations ready to carry it forwards. It is a privilege to be allowed to perform surgery on anyone and we should share this humbling feeling with all medical students.

**MENTORING**

Our experiences were dictated by the surgeons who taught us, which reinforces the importance of mentoring. We need to help medical students see surgery in a friendly way early on, without them feeling diminished or being harassed.

Through our work with medical school surgical societies, we have brought inspirational surgeons to break some of the
stereotypes and help medical students as early as possible in their careers. Professor Farah Bhatti and the Women in Surgery forum at The Royal College of Surgeons of England were essential in helping to recruit surgeons from all grades and from different regions of the UK. At one of our conferences, an attendee was astonished when a female consultant came with her son, demonstrating that surgery and having a family were not mutually exclusive. It only took a half-day conference for students to see a surgeon who looked like them and realise it could be them if they wanted. As one attendee stated in her feedback: ‘Seeing all the women who made it made me feel more confident.’

CONCLUSIONS
Our own experiences and those we have collated through our questionnaire highlight how important it is to mentor the next generation of surgeons. This can include informal mentoring, being a friendly face in theatre, or speaking up when seeing someone suffering harassment or discriminating behaviour.

As we graduate as doctors and enter the next phase of our training, we can see how lucky we have been to have had mainly positive experiences. We will ‘lift as we climb’ and strive to help those around us as our mentors have helped us – and we hope that you will too.

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Some thoughts on a career in surgery

Professor Averil Mansfield reflects on what made her surgical career rewarding.

A Mansfield CBE
Retired Consultant Vascular Surgeon
Professor Averil Mansfield CBE ChM FRCS FRCP is a retired consultant vascular surgeon who worked at St Mary’s Hospital in Paddington, London from 1982 to 2002, after attending the University of Liverpool School of Medicine and training at the Royal Liverpool University Hospital. In 1993, she made history by becoming the first British woman to be appointed a professor of surgery. She was the founding chairwoman of the RCS England’s Women in Surgical Training Committee in 1991 and is a former RCS England Vice-President.

I was determined to become a surgeon from my school days. As a schoolgirl, I knew little of my proposed career except what I had learned from books. There was no family connection and no experience of higher education.

In retrospect, it is evident that I made a choice that suited my temperament and practical nature. I was happy in my work and had no regrets. Hopefully you feel likewise, but I feel concern that some of the changes in medical practice have lessened the enjoyment of a surgical career. What was it that made it such an enjoyable job?

Being part of a team
From house officer to retirement, I was always an important component of a team. No less important for being a newly qualified doctor than for being the professor. At every stage I knew and was known by every member of that team. I never had to phone nor be phoned by a complete stranger. Concern about and responsibility for the members of the team provided security and nurture.

Perhaps I was simply fortunate in that when I was a junior member of those teams, I was guided by decent, caring trainers who set me an example which I hope I followed. I was treated with kindness and respect and never belittled. I can honestly say that I never met discrimination and if I was the best candidate for a job, I got it.

In my opinion, the European Working Time Directive destroyed the ‘firm’ structure, the restoration of which is feasible and, I believe, desirable.

Taking responsibility for and knowing my patients
For me, the best part of being a doctor was sitting down in clinic with a new patient and asking a series of regular questions, followed by specific enquiries and the examination of the whole patient. Only then would I request the specific investigations to provide confirmation of the expected diagnosis. I still believe that history and examination are the essential building blocks to diagnosis – as satisfying as receiving a Christmas parcel and trying to work out its contents. Importantly, during this process, a relationship of trust
is developed through continuity of care with a patient. I find it hard to imagine that simply taking the next ‘gallbladder’ off the shared waiting list can allow for such a relationship. A large part of the pleasure in my job arose from those relationships. I greatly enjoyed the personalised care that was possible in such a system.

In my early years, surgical patients were in hospital for far longer than they are today. That allowed us to know them as people and not simply operations. Clearly, spending less time in hospital is here to stay and indeed beneficial. Thus, finding a way of improving continuity of care is necessary. Meeting the same team as an outpatient and as an inpatient surely would improve the care that we give and the confidence felt by the patients. I would have struggled to take part in a system which had an impersonal waiting list. Seeing my patients after surgery in clinic was also important to me, both from that continuity aspect, but also in the learning component. The results of surgery are not always as positive as we might hope for and a frank discussion with the patient will often resolve concerns and even complaints. It undoubtedly helped to have met them and their nearest and dearest preoperatively. Indeed, in some of the more complex and unpredictable cases, I made it a rule that I must see the next of kin before the operation. I normally tried to speak to them on the phone at the conclusion of the operation.

Teaching and training
At every stage of my career, I saw myself as a teacher. There is always someone in your ambit who would benefit from your experience and knowledge. Passing it on is high on my list of the pleasures of the job. Even better is the joy of seeing your trainees making progress and, yes, even becoming better than you are. I love the motto of ‘Lift as you climb’ used by RCS England Women in Surgery. Helping those on the way up at every stage should be the norm.

People
There are few jobs with as many diverse relationships as in medicine. In the course of a medical lifetime, there will be thousands of patients and they are of course the reason we are there in the first place. Altruism is the driving force. Aside from the patients, we have the joy of working with a wide spectrum of people in other roles. Nurses, secretaries, technicians, other doctors — people to be cherished both for their skills in their particular roles and for their support and friendship. How many patients have their lives saved not by our skills but by an observant theatre nurse, anaesthetist or radiologist? I was frequently saved from disaster by a caring, well-organised secretary. Most of us have activities outside the hospital environment, such as with the Royal College of Surgeons of England, the university, or the General Medical Council. I certainly look back on those extra roles with gratitude for the opportunities they allowed me to guide the profession and to safeguard its standards.

Speaking of gratitude prompts me to record my gratitude to the many colleagues, trainers, trainees and patients who supported me in a career that I loved. Of course, there were times of sadness, of disappointment, and of soul searching, but the enjoyment of it, the fun of working with likeminded people, and the real pleasure of operating were all components of a job that never felt like ‘work’.

So, my message is to encourage you to seek ways to improve areas about which you are concerned and to ensure that we have a diverse and respected workforce. It is a privilege and a responsibility to be entrusted with the care of our fellow human beings. For me it was also a joy.
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Bias in medical artificial intelligence

How human biases impact the use of artificial intelligence in medicine.

AJMS AlHasan Specialist General Surgeon @A160186
Jaber Al-Ahmad Al-Sabah Hospital, Kuwait
Bias, discrimination and social injustices have plagued human society since the dawn of time. Healthcare and its affiliated technologies are not immune to such perils. With the advent of artificial intelligence (AI) in diagnostic and therapeutic medical interfaces, bias may be intentionally or inadvertently introduced into medical technology.

This paper starts with a brief review of the basic concepts behind AI in order to explore how and where bias may arise. This is followed by several documented instances of bias incurred against certain patient subgroups through the use of medical technology. Finally, a simple method is proposed to help identify and treat such bias.

**AI: A SUMMARY**

The world of AI is filled with jargon but as practitioners and users of medical technology, we must understand the concepts through which AI functions in order to learn to identify where bias can occur, producing discrimination and inequities in healthcare. To begin with, massive collections of data are acquired. These arise from scientific research and electronic health records, and can include information on potentially any aspect of medical practice such as patient characteristics, symptoms of specific diseases, diagnostic criteria, medication doses and abnormal signs on radiographs. These data are used to construct algorithms, written in programming language and fed into the machine being developed. Algorithms become the machine’s background reference through which it is able to recognise and interpret incoming information. Akin to a child interpreting the world through the instructions of its parents and teachers, together with their memories and experiences, AI interprets the world through data algorithms.

Like humans, AI also needs to reflect on and learn from new experiences in order to improve its performance. When AI learns from new data with the help of human input, it is termed machine learning; when it learns by itself, without the need for human input, that is deep learning.

AI uses computer vision to interpret visual information such as images and videos, to which it can then react based on its algorithms. Natural language processing (NLP) is how AI can understand and interpret human language, whether spoken or written.

**THE BIAS CASCADE**

From reviewing how AI is created, one can see where potential entry points for bias are located. These successive entry points create a domino effect of biases and prejudices with alarming clinical consequences.

The bias cascade starts with the data collection process. Disparities are known to exist in the recruitment of research subjects, where certain populations (eg women) are underrepresented. Since data form the technology’s backbone, biased or skewed data fed into AI algorithms will eventually result in biased and therefore inaccurate clinical performance. Machines are only as impartial as the data that have been fed into them. Experts using these data to construct algorithms may also carry their own prejudices and these may further compound inherent bias in the technology. Finally, access to healthcare facilities and medical technology suffers its own forms of inequalities, culminating in a compound interest of bias.

The medical literature is teeming with evidence of bias in medical technology. What follows are some examples of such bias on four fronts: racial, gender-based, socioeconomic and linguistic. When multiple factors are involved in creating bias (whether consecutively or simultaneously), this is referred to as compound bias.

**Racial bias**

Racial inequalities are intricately woven into the fabric of modern society. Awareness and transparency can help to uncover such inequalities that have made their way into healthcare. A leading example is a study published in *The New England Journal of Medicine* in 2020 by Sjoding et al, which sparked introspection in the medical community by unmasking racial bias in pulse oximetry sensors. The authors found that at the same oxygen saturation readings, Black patients were significantly more hypoxaemic than their White counterparts. Given the prevalence of hypoxaemia in patients with COVID-19 and the importance of pulse oximetry readings in steering management, this study has incited a serious look into unacknowledged and unconscious biases embedded in the design of hospital instruments.

In plastic surgery, AI designed to detect features of attractiveness on patient photographs would make detrimental decisions on Asian patients if it were programmed to recognise only White features for signs of beauty. Alarmingly, AI taught to detect skin cancer on images of fair skin may not be able to reliably diagnose lesions on darker skin.

**Gender bias**

AI interfaces designed to read radiological images use computer vision to identify radiological abnormalities. They are expected to outperform human radiologists by reading images faster, with greater...
More diverse data improve the software’s clinical performance in a diverse patient population

Socioeconomic bias
A prominent example of compound bias was demonstrated in a study by Obermeyer et al. They showed how socioeconomic disparities, originally driven by racial disparities, resulted in an underestimation of sickness in Black patients. They studied a hospital AI algorithm designed to identify patients who will benefit most from extra care to reduce their future healthcare costs. This algorithm was being fed insurance and cost data, meaning that those patients who already cost the most were predicted to cost more in the future and were therefore destined to receive additional care. However, in the US, more money is generally spent on White patients than on Black patients and so, for any given sum of money spent on healthcare, the Black patients were actually sicker.

The algorithm overlooked all the socioeconomic and racial barriers Black patients face, from difficulties in accessing hospital care in poverty stricken communities to the inability to afford insurance premiums and treatment, and the general distrust in healthcare and fear that Black communities may hold based on unpleasant past experiences of racial discrimination. Consequently, the sicker and poorer patients, on whom less money was already being spent, were unlikely to be offered the extra care they required based on the algorithm’s inherently biased choices.

Linguistic bias
AI can comprehend human language through NLP – but which language? The simple answer is the language or dialect it has been fed and taught to recognise through machine learning. This creates yet another bias with which patients and healthcare professionals must contend.

A team at the University of Toronto used an AI algorithm to identify language impairment as an early sign of Alzheimer’s disease, thereby making it easier to make a diagnosis. In practice, however, it was found that the algorithm was best at identifying Canadian English, putting French speakers and those who used other dialects at a disadvantage (and therefore at risk of being misdiagnosed).

4D SOLUTIONS TO DISCRIMINATION
Eliminating bias and creating fairness and equity in AI means being conscious of bias at every potential entry point. Rajkomar et al recommend doing so at various ‘equity checkpoints’, which they locate in ‘design, data collection, training, evaluation, launch review and monitored deployment’. A more simplified, cyclical approach is found below, with four main phases or entry points, namely data, development, delivery and dashboard (Figure 1).

Figure 1 The 4D model: a cycle of four entry points where bias in artificial intelligence may be detected and the key aspects at each point that help eliminate bias.

DATA
diverse unbiased representative

DASHBOARD
bias reporting feedback recommendations

DEVELOPMENT
fair algorithms pre-testing ethical approval

DELIVERY
equitable access bias consciousness real time evaluation
Data
Since data act as the driving force behind the technology, it is imperative that the data used to feed AI algorithms are unbiased and representative of the target populations. This begins with diverse and well balanced study populations in medical research, paying particular attention to racial and ethnic diversity, gender balance, socioeconomic equity, and other social, as well as ethical, determinants of disease and access to healthcare. This also applies to electronic health records, and any other documents and sources of data used in AI algorithms. The use of neutral and fair language is mandatory when using or designing keywords to retrieve data records.

Global collaborations play a vital and constructive role in procuring massive quantities of diverse data. In much the same way that the World Health Organization amassed global information on the COVID-19 pandemic, healthcare professionals worldwide can contribute data to create equitable AI platforms. Furthermore, academic centres, where most medical research is based, may not be as representative of the general community as other healthcare institutions.

Development
This phase relies on engineers and programmers to carefully select data variables and write algorithms that are unbiased. They must also work in liaison with clinical practitioners to test the technology and make sure it does not exhibit bias in practice before releasing it to market. Machines should be tested in different patient populations for both scientific and ethical performance, and an ethical committee should be present to approve machines for clinical use.

A study led by Dr Fahrenbach at the University of Chicago is a brilliant example of how socioeconomic bias in AI algorithms was identified early, averting an ethical disaster. The algorithm was designed to predict patients who would have the shortest hospital stays in order to allocate them additional care and resources after discharge. Among the patient characteristics used as data variables and found to correlate significantly with length of hospital stay were the patients’ zip codes. On closer inspection, the study team found that patients living in more affluent areas had shorter hospital stays and were being selected by the algorithm to receive extra care they did not need whereas those from underprivileged areas would have been denied care that they needed. Testing the algorithm early made sure it was not released for hospital use.

Delivery
Healthcare professionals must become more conscious of inherent biases in the machinery and AI interfaces they use. This starts by ensuring equitable patient access to the technology, and then diligently observing how it performs in diverse populations and underrepresented communities. Any bias noticed should immediately be reported to an appropriate committee at the hospital, which can then communicate with the developers.

Dashboard
Understanding bias inherent in medical technology allows clinicians to question the accuracy of the technology if the results do not meet the expectations from their clinical expertise. It is crucial to create a ‘dashboard’ through which AI technologies can be evaluated. Performance data can then be used to give feedback. At the hospital level, feedback from healthcare professionals should be reviewed by a committee that comprises AI experts/biomedical engineers, clinical experts, ethicists and administrators. This committee should then be able to communicate with designated decision makers, which may include the developing company or healthcare legislators. For example, in the case mentioned earlier of racial bias in pulse oximetry, a letter was written to the US Food and Drug Administration to draw attention to the matter. Awareness and accountability are key components of any ethical dashboard.

CONCLUSIONS
Bias exists in medical technology and may be racial, gender-based, socioeconomic or linguistic. Understanding how AI works helps us identify bias before it can have dire consequences on patient care. Ethical governance over AI is imperative if it is to succeed in helping those patients it is intended to help.

REFERENCES
Being asked to submit a few words on work–life balance is always tricky. I want to share my outlook in the hope that it will resonate with others but equally, it is Sunday night and I’m sitting here writing about work.

I’ve been a consultant oral and maxillofacial surgeon for ten years. I specialise in the treatment of head and neck cancer, which is both physically and mentally demanding; my surgeries take on average 12–14 hours, sometimes longer.

I realised about five years ago that in order to continue to do this job, I needed to take better care of myself. I wasn’t doing much exercise. I was eating reasonably well although I was overweight and finding work increasingly stressful. I knew I had to do something about it but how do you break the cycle and develop more healthy habits? How do you find time in a busy surgical workload to fit in something else?

My husband has always been a keen cyclist and I would regularly protest that I would never take up cycling for anything more than commuting. However, he’s a member of our local cycling club, the Cowley Road Condors, which has nearly 100 women members. Going along to social events with him soon introduced me to lots of women who were so enthusiastic about riding, and I couldn’t help but become fascinated and intrigued as to what drove them to ride so much.

Combined with my desire to improve my health and fitness, this led to me signing up for the London duathlon. I used to run and it seemed like a safe way to try cycling. I followed the training plan, rode my commuting bike and finished the event close to last – but I had a great experience. I felt better in myself and less stressed with all the time I was spending outside. I then bought a road bike!

This was less than four years ago and I am now addicted to cycling. I cycle approximately 200km a week, riding both on my own and with friends from the cycling club, which I have now not only joined but I have even become its welfare officer.

I can’t extol the virtues of this highly enough. It makes me leave work – I can’t just do that extra letter or report as I need to meet up with friends to go cycling. It makes me spend time in the open air, which is perfect for mental health and wellbeing. I can do it with friends, which is great for my social life, but I can also do it alone, which means that if I do get stuck at work and miss a club ride, I can just head out by myself (and indeed, sometimes this is just what I crave). I especially enjoy cycling in the dark, on my own, with just my lights and maybe a podcast for company. It keeps me sane after long days in an artificially lit operating theatre.

I’ve also met some wonderful people in the cycling world, from all sorts of different backgrounds and jobs, and this has been a real pleasure. I think occasionally we get so embroiled in the NHS that we forget other things exist. Particularly during the COVID-19 pandemic, it was very comforting to ride with friends who knew nothing of the stresses and difficulties we were dealing with over the last year.

Cycling may not be your thing but I would encourage all surgeons to develop a hobby outside of work that is fun, a little bit time consuming and completely different. It brings perspective to life, gives you that excuse to finish work and get outside, and it might just keep you healthy in the process.
My wife is a gynaecological oncology surgeon and I’m a cardiac surgeon. When I told her that I had been asked to write an opinion piece on work–life balance for the 30th anniversary of the Women in Surgery (WinS) initiative of The Royal College of Surgeons of England, she smiled her special WinS smile. I remembered it well from when she had heard my experiences of trying to take shared parental leave. It was the smile of 100,000 women who had told this story countless times before me and were gently allowing me to mansplain the injustices I had faced.

When I had made it known that I was planning to take three months of shared parental leave with my son, a concerned and well intentioned senior colleague took me aside and asked whether I thought this was a good idea. After all, he explained, I was just establishing my practice as a consultant. It is a legitimate concern to raise – if you believe that surgical training is so fragile and institutional support so tenuous that a period away from work could jeopardise a surgeon’s career.

Under 1% of eligible parents in the UK take shared parental leave and I was probably, proudly, the first cardiac surgeon in the country to do so. My wife returned to work and I was inconceivably placed in sole charge of an infant. Aside from the joy of actively participating in my son’s earliest adventures and the privilege of being present as a father, I found that I had opened the floodgates of my expectations.

If I could take a three-month sabbatical for this honourable endeavour, then I could surely leave work on time without detriment to my patients or my career. And if I could do it, could I also persuade others to do so? Every positive work–life decision was countered by the overwhelming concern that I was sabotaging my future career prospects or, worse still, that the idea of leaving work on time would somehow snowball and the resulting reduction in workforce hours would cripple the health service.

The notion that physicians must exhibit preternatural dedication to their vocation is flawed. We all know enthusiastic-but-average colleagues as well as indifferent savants. The UK has only 67% of the average per capita spending on healthcare compared with similar countries, along with the lowest ratio of doctors and nurses, and yet we deliver broadly similar healthcare outcomes. Despite this, we continue to feel an overwhelming personal burden of responsibility towards our patients, colleagues and institutions to do more with ever diminishing resources.

Women in surgery have had the lion’s share of experience in juggling outdated (but tenacious) societal expectations of them, together with the hurdles of inequalities at work. I had always thought that in order to be an advocate and an ally for my colleagues, I needed to make vocal stands for them in forums where women’s voices were being muted. My experiences have showed me that actually, men could most effectively promote the interests of women by promoting their own.

If all eligible men took shared parental leave (or adoption leave or carer’s leave), employers would not be able to gender their cynicism at who would take their legal leave entitlements. If all employees prioritised their own wellbeing for recreation and recuperation, it would be harder to maintain inequalities directed at those who prioritised the wellbeing of their dependents. Whether by example or by strength in numbers, if each of us chooses to respect our own work–life balance, it will enable others to do so too.

REFERENCES
Emergency general surgery: an excellent career for work–life balance

Some advantages of pursuing emergency general surgery.

Vikas Pandey Consultant Surgeon and Clinical Lead in Emergency General Surgery, Department of Surgery, Watford General Hospital, Watford, UK
had wanted to be a vascular surgeon from my third-year surgical attachment. As a house officer and through the SHO years, I had the opportunity to work with some of the country’s best. They mentored me and I undertook a period of research that was fruitful academically in terms of prizes and presentations. I found myself on several influential committees both nationally and internationally during my specialist training, which was also going well. I had arranged a fellowship in Australia for the end of my higher surgical training rotation. At the same time, there was interest from some academic institutions who were keen on employing a vascular surgeon with my educational background.

All that changed in the final two years of my training when, rather unexpectedly, I received a letter petitioning divorce. At that time, I was married and had a three-old son. For personal reasons, I fought for child custody, and the following two years were difficult with emotional days in court. Eventually winning custody in my favour, I needed assistance from my parents to bring up my son as I completed the last couple of years of my training. These were not easy times. I had to swap all my on-call shifts to work most of them during term time when my parents were staying with me.

Five weeks from the end of my training, our clinical director received a phone call from his counterpart at a neighbouring trust. The trust was keen to find a senior consultant also running the surgical review clinic (known as the ‘hot clinic’) from 2pm to 4pm. The second week consists of operating in emergency theatres in the morning and covering the hot clinic in the afternoon.

In our trust, we have a well-established abscess pathway streamlining the care of patients who need expedited surgery but not necessarily admission. We also have pathways in place for the management of right and left iliac fossa pain.

The hot clinic opened in December 2019 for patients referred from primary care and our emergency department. It offers patients easy, expedited access to surgical services for a range of conditions, including biliary disease, hernia-related problems and non-resolving abdominal pain. We also use the hot clinic to manage conditions that would have required hospital admission in the past. Such conditions include mild to moderate diverticulitis and acute cholecystitis, as well as patients with non-specific abdominal pain. It is worth noting that there was an exponential increase in use of the clinic since the start of the COVID-19 pandemic, as general practitioners’ awareness of the service improved (for a two-month period in 2020, we ran our entire ambulatory surgical service from the one room).

The third week is for specialist activities, supporting professional activities and professional development. The timing of activities depends on the consultant’s subspecialty. Activities include a day surgery list and joint specialist clinics and operating lists to maintain specialty interests. The predictable rota and availability of the emergency surgeons in their third week also puts them in a prime position to lead the departmental teaching programme, strengthening the job’s educational component.

Compensatory rest and two off-site activities in the fourth week ensure that the emergency surgeon has a continuous nine days off every four weeks.

**CONCLUSION**

I undertake much less vascular surgery than earlier in my career. However, the number of emergency laparotomies that I have performed during this time is at an all-time high. Our department is making changes to
ensure that trainees have a similar level of protected ‘bleep free’ emergency operating time during their surgical placement. As an emerging subspecialty, experiences within individual emergency surgical units vary. It is not a popular career option at this stage, with departments often staffed by non-training grade or locum doctors.

I am fortunate that I work in a department that has been supportive of changes implemented that have won acclaim from our emergency department and the trust executive board. This care model is also in line with recommendations by the National Confidential Enquiry into Patient Outcome and Death. These changes have streamlined patient care and responsiveness of our department as a whole. I am also grateful that I have no night-time commitments, which has eased the burden of childcare requirements.

What individual consultants do in their week off very much depends on their interests. Some use this time for private practice. Other colleagues attend courses, workshops and conferences that they may have previously had difficulty attending due to the constraints of study leave. For me, the mandated week off has allowed me to develop interests outside of surgery. These include teaching meditation (a practice I started after joining this trust) and a YouTube channel with over 10,000 subscribers.

For many of us, caught in the ‘rat race’, it is easy to lose sight of why we decided to go into surgery. Many of us chose this speciality for the love of the ‘art’. Things don’t always go to plan. Personal circumstances or family life may preclude you from the subspecialty of your choice – or it may be that you have just had enough of the rat race. If this is the case, I cannot recommend emergency surgery enough as a fulfilling career that will allow you to have a satisfying life outside work.

### REFERENCES


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**Table 1 Emergency surgery timetable**

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<tr>
<th>Week 1</th>
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EAU consultant cover 8am–8.30pm (5pm at weekends). Surgical handover at 8am and 8pm daily. Out-of-hours cover for the EAU is provided by the surgical on-call team.

**Week 2**

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EOT team brief at 8.15am daily. 1-2pm lunch and administration. ESAC 2-4pm. Six new patients.

**Week 3**

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Foundation year teaching. Tuesdays 12 noon to 2pm. Departmental teaching Thursdays 12 noon to 2pm.

* Timing of specialty lists, clinics and SPAs varies.

**Week 4**

Off (includes two ‘off-site’ SPAs)

EAU, emergency assessment unit; EOT, emergency operating theatre; ESAC, emergency surgical assessment clinic (aka the hot clinic); SPA, supporting professional activities; SRC, surgical review clinic.
Women in UK paediatric surgery: past, present, future

A look into the history of paediatric surgery and its female trailblazers.

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PAEDIATRIC SURGERY: THE EARLY DAYS
Although paediatric surgery is a relatively young specialty and was only formally recognised as an independent surgical specialty in the last century,¹ the history of paediatric surgery started well before that. The first paediatric surgical atlas written in 1465 illustrates operations for multiple common paediatric surgical conditions.² The beginning of the 20th century saw the appearance of the first surgeons who devoted their entire practice to paediatric surgery around the world.² These included William Ladd, who was the surgeon-in-chief in Boston in 1927, one of the founders of paediatric surgery in the US,³ and Denis Browne, a consultant paediatric surgeon at the Hospital for Sick Children in Great Ormond Street in 1928, Ladd’s contemporary and founder of paediatric surgery in the UK.⁴ The British Association of Paediatric Surgeons (BAPS) was founded in 1953 and the American Pediatric Surgical Association (APSA) in 1970.²

History of women in paediatric surgery
The history of women as surgical practitioners stretches back to at least 3500BC. There is evidence of female surgeons in Mesopotamia, Greece and Egypt in ancient times. Queen Shubad was a female surgeon in Mesopotamia, who was buried around 3500BC with her surgical instruments beside her. Wall paintings in ancient Egyptian tombs and temples as well as Greek mythology and Hebrew writings portray women performing surgical procedures.⁵

Women were discouraged from studying medicine, and regulations in the middle ages forbade women from practising surgery. King Henry VIII famously proclaimed: ‘No carpenter, smith, weaver or women shall practise surgery.’ When it was founded in 1540, women were barred from the Company of Barbers and Surgeons.⁶ A notable figure in paediatric surgery during this period was Margaret Hoby (1571–1633), an English lady who described in her diary in July 1602 how she attempted to surgically treat an anorectal malformation in an infant. Mostly known for writing the first diary by a woman in English, her writing contains descriptions of her providing medical and surgical treatment to her community, with special interest in the paediatric population.⁷

In the 19th century, more women began to join the medical profession although it remained virtually impossible for them to acquire formal medical training. The modern period of surgery opens with Margaret Ann Bulkley (1795–1865), who impersonated a man to practise surgery: she was known as Dr James Barry and served in the British army as a surgeon. Women were first allowed to sit the examinations of The Royal College of Surgeons of England (RCS England) in 1906. The first female surgeon with formal recognition was Eleanor Davies-Colley, admitted as a fellow in 1911.⁸

More women have been attracted to paediatric surgery than any other surgical specialty. During the early decades of the establishment of paediatric surgery as an official specialty, there were key female figures who overcame prejudice, won the respect of their peers and blazed the trail for women in paediatric surgery.

Gertrude Herzfeld
Gertrude Herzfeld (1890–1981) was the first practising woman surgeon in Scotland and the first female paediatric surgeon in the UK. Having graduated from the University of Edinburgh in 1914, she was appointed as consultant paediatric surgeon in 1925.⁹ She mainly worked in the Royal Edinburgh Hospital for Sick Children, and Bruntsfield Hospital for Women and Children. As a woman in a male dominated field, opportunities were scarce and Herzfeld had no illusions, saying that ‘it was the First World War that gave me my chance’.⁸ She was the first female fellow of the Royal College of Surgeons of Edinburgh and was a skilled surgeon, operating on a wide variety of conditions. It is said she once performed six hernia operations in under an hour.⁸ Herzfeld actively encouraged other women to follow a medical career, passionately promoting that cause as president of the Medical Women’s Federation.

Isabella Forshall
Isabella Forshall (1902–1989) was one of the most influential figures in paediatric surgery in the UK. She graduated from medical school in London in 1927, and initially worked at the Royal Liverpool Children’s Hospital and then simultaneously also at Alder Hey Children’s Hospital until her retirement in 1965.⁹,¹⁰ As a woman, she was not permitted on to the medical board for many years and was finally appointed honorary surgeon (consultant) only in 1942.⁹,¹⁰ She became the second president of BAPS in 1958.⁹,¹⁰

Forshall had a passion for paediatric surgery and was the driving force behind the foundation of the Liverpool neonatal surgical unit in 1953.⁹,¹¹ This was a great achievement and resulted in a significant reduction in neonatal mortality from 72% to 24% in surgical congenital anomalies within the first six years of activity.¹⁰ The success of this unit inspired the establishment of similar units in the UK and around the world. She not only excelled in the clinical management of her patients but also

More women have been attracted to paediatric surgery than any other surgical specialty
1962. She became a fellow of RCS England in 1984 and the first woman chair of a major committee, the General Medical Council, in 1991. She gained her fellowship in 1967 at a time where there were only nine female surgeons in all of the UK. Doig would say: ‘Look at me, Indian in appearance, name and dress, qualified overseas, still with an Asian accent. If I could to it so can you. You can do it if you really want.’

**Caroline Doig**

Caroline Doig (1938–2019) was the first woman elected to the council of the Royal College of Surgeons of Edinburgh in 1984 and the first woman chair of a major committee, the General Medical Council, in 1991. She gained her fellowship in 1967 at a time where there were only nine female surgeons in all of the UK. Doig worked in paediatric surgery in different cities, including Glasgow, London and Manchester. She promoted other women in surgery, setting up the Hunter–Doig medal to celebrate women with surgical excellence and ambition. She was an innovative thinker and among the first to introduce the use of flexible endoscopy in paediatric surgery.

**Vanessa Wright**

Vanessa Wright (1943–2015) was the first female paediatric surgeon in London. She studied medicine at University College London. During her studies, she was found to have a significant risk of developing leukaemia and she was advised to avoid pursuing a medical career. However, she persisted and managed to thrive in the highly demanding role of paediatric surgeon. She was appointed as consultant at Queen Elizabeth Hospital for Children in Hackney in 1977 when she was only 34 years old. She was an exceptional and dedicated surgeon with very high ethical and clinical standards who was an inspiration and example for many colleagues and trainees.

**Su-Anna Boddy**

The first mother to be elected as a Council member of RCS England, Su-Anna Boddy graduated from St Bartholomew’s Hospital medical school in 1976 and achieved fellowship in 1983. She worked as a consultant paediatric urologist at St George’s Hospital in London until her retirement in December 2015. She was working full time doing research during her first pregnancy and opted for a flexible training scheme as a registrar during her second pregnancy. She was an advocate for the option of flexible training and an inspiration for others who want to combine parenthood with paediatric surgery.

Of course, not all of the significant female figures can be included in detail in this article. Other notable women paediatric surgeons in the UK who have retired include Irene Irving (Liverpool), Rowena Hitchcock (Oxford), Jenny Walker (Sheffield), Margaret Mayell (Nottingham), Lucinda Huskisson

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**Helen Noblett**

This famous UK paediatric surgeon had a rich publication history pertaining to various areas of paediatric surgery. Her lasting contributions include the first report of successful treatment of uncomplicated Hirschsprung’s disease, which is still in use. Before working in Bristol, she was a member of Russell Howard’s team in the thoracic unit at the Royal Children’s Hospital in Melbourne, which became internationally known for the survival rate of patients with oesophageal atresia and congenital diaphragmatic hernia.

**Leela Kapila**

One of the most well known names in paediatric surgery in England, Leela Kapila defied stereotypes by being a woman consultant surgeon of Asian origin. Born in Burma (Myanmar), she graduated in medicine from India and moved to the UK in 1962. She became a fellow of RCS England in 1966 and trained in paediatric surgery at the Great Ormond Street Hospital for Children. In 1974, she was appointed as consultant paediatric surgeon at City Hospital in Nottingham, where she stayed until her retirement in 2002. Apart from her clinical responsibilities, she had multiple leadership roles including president of BAPS, examiner in paediatric surgery for the Intercollegiate Board and senior Vice-President of RCS England. She was awarded Officer of the Most Excellent Order of the British Empire for services to surgery in 1996.

Despite being an immigrant female surgeon wearing traditional Indian clothes in a male dominated field, Kapila denied that she faced any prejudice and insisted that she met the same problems as her male colleagues. She was the chair of RCS England’s Women in Surgical Training network (now known as Women in Surgery) and encouraged women to follow a surgical career: “You have got to have the personality to cope with the life [as a surgeon]. If you don’t then you don’t make the grade; there is no reason why women cannot do this. […] It’s not a case of despite being a woman you should get there but because of who you are.”

When anyone questioned whether they could become a successful surgeon, Kapila would say: ‘Look at me, Indian in appearance, name and dress, qualified overseas, still with an Asian accent. If I could to it so can you. You can do it if you really want.’
(Bristol), Sanja Besarovic (Hull), and Kalpana Patil and Evelyn Dykes (London).

**THE PRESENT**

An increasing number of women are entering the medical profession. In the UK, women represented 64% of entrants to medical school in 2020 but only 13% of consultant surgeons.23 This compared with 3% of surgical consultants in 1991.

Paediatric surgery is currently the most popular surgical discipline for women in England, with 38% of paediatric surgeons of all grades being women (28% of consultants, 46% of specialty registrars).21 Of the 135 consultant members of BAPS, 32 (24%) are women (personal communication, BAPS). Similar trends are reflected in Europe, with 27% of all members of the European Paediatric Surgeons’ Association being female in 2017.22 Australia and New Zealand were the first to have reported a surgical training scheme in which women outnumber men. In 2007, women accounted for 20% of members of the Australasian Association of Paediatric Surgeons and occupied 55% of the specialty training posts in Australia and New Zealand.23 A 2013 study noted that women represented 22% of registered paediatric surgeons and 53% of paediatric surgery registrars in Australasia.1

**Academic contribution and leadership**

Women in the surgical specialties are known to be underrepresented in academic and leadership positions.32 Nevertheless, in paediatric surgery, female authorship has been increasing. Over the last 30 years, there has been a significant rise in the number of articles with female authors (as well as in the number of first authors and corresponding authors who are female) in the Journal of Pediatric Surgery, Pediatric Surgery International and the European Journal of Pediatric Surgery.24 However, among collaborative publications (ie with authors based in two or more countries), only 5% had a female lead author.

A study in North America also noted that women encounter difficulties when pursuing a career in academic surgery.25 A similar UK study found that most female paediatric surgeons had not considered pursuing a career in academic surgery although they usually expressed a desire to be more involved in research.26

Men significantly outnumber women in leadership positions in paediatric surgery. At present, only 22% of the executive board members of the European Paediatric Surgeons’ Association are female.26 In the UK, BAPS has had only two female presidents through the years (Leela Kapila and Isabella Forshall). Majella McCullagh was an executive committee member, and Evelyn Ong was the past and only ever female honorary secretary.

**THE FUTURE**

Why is it important to talk about women in paediatric surgery? The number of women entering medical school is increasing and in some medical schools, men represent only 30% of the students.17 It would be a shame if surgical candidates were therefore chosen from only a third of the student body.

Multiple factors have been proposed to explain the reasons behind the underrepresentation of women in surgery and the obstacles faced by women in paediatric surgery are likely to be similar to those in other surgical specialties, including male orientated culture, lack of appropriate role models, long and irregular working hours, and work–life imbalance. It is perceived that a surgical career is more challenging for women because of the difficulty of integrating the demands of family life with full-time surgery. Some of the issues contributing to the paucity of female medical students choosing surgery are concerns about childbearing and childcare during their active surgical careers. In the UK, most current female surgeons have been able to take time for maternity leave during their careers.25

A survey in the US showed that although 96% of paediatric surgeons were satisfied with their career choice, a few reported areas of concern were lack of balance, with little time available for family.27 The risk of work–family imbalance was assessed to be higher in female paediatric surgeons. In view of those results, the American Pediatric Surgical Association established a specific taskforce on family issues, addressing the social and family interests of its members as well as the issues of work–family balance.27 Another North American study reported lack of mentorship and role models as having a negative impact on career progression and satisfaction for female paediatric surgeons.25 Interestingly, in a UK survey, very few women in paediatric surgery felt disadvantaged by a lack of mentorship and the vast majority declared that they were content with their career choice.25

What more can be done to eliminate these obstacles? First, education and training committees should work towards establishing quality training programmes that achieve clinical excellence and equal training opportunities. Flexible training schemes might result in a more manageable lifestyle and address the concerns regarding work–life balance.25 The implementation of the European Working Time Regulations remains a controversial step in this direction as some claim that it will improve
work–life balance whereas others argue that it would hinder surgical training by reducing operating time. Following the lead of the American Pediatric Surgical Association, a UK and European taskforce could be established to address concerns pertaining to lifestyle. Additionally, female mentoring schemes such as those provided by Women in Surgery (and an updated view of leadership development combined with appropriate opportunities) might confront the issue of lack of role models in academic and leadership positions.

CONCLUSIONS
Of course, apart from the collective measures, the responsibility to strengthen the role of women in paediatric surgery lies with every individual surgeon. Drawing inspiration from the legendary female figures of the past, the women paediatric surgeons of today and tomorrow are more likely to flourish by being proactive, striving for excellence and demonstrating resilience, pursuing a career in the wonderful field of paediatric surgery.

ACKNOWLEDGEMENTS
The authors would like to thank Mr David Drake (BAPS Archivist) and Ms Shan Teo (BAPS Digital Manager) for providing information on historical and current BAPS membership and executive positions.

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Dogecoin is going to the moon! My Twitter timeline will periodically be filled with tweets of investors and technology optimists predicting that Dogecoin, one of the many available cryptocurrencies, will rocket in value. In fact, Dogecoin may also literally be going to the moon. In May this year, SpaceX, Elon Musk’s rocket company, confirmed that it has booked a mission to the moon in late 2022, funded entirely by Dogecoin. In the weeks leading up to writing this article, cryptocurrencies (including the big names of Bitcoin and Ethereum) have regularly been in the news as their values have risen and fallen. This has caused many people’s and companies’ investments to increase in value and subsequently crash. With this topical (block)chain of events, I thought I would take the opportunity to write about what cryptocurrency is as well as about the technology that underpins it, and its current and potential role in healthcare.

WHAT IS THE BLOCKCHAIN?
The technology behind the blockchain is not new. It was first described in 1991 as a system to timestamp digital documents. Its wider adoption was not until 2009, when the mysterious Satoshi Nakamoto (likely a pseudonym of the developer or possibly group of developers) created the digital currency Bitcoin using the system.

In order to explain the blockchain, it is best to stay with the theme of money and banks. The traditional high street bank holds a giant spreadsheet of your investments and withdrawals. Each time you add or take out money from your current account, your bank’s computer will access its internal server, see how much money there is and then add or subtract the new amount accordingly. Regardless of whether you use internet banking or any walk-in high street branch, the process is the same. This is a centralised database as all information is held in a central location (Figure 1).

In the blockchain, data are stored in a chain of blocks. Each block contains three key pieces of information: the relevant data (eg the amount of money you have), a unique digital fingerprint (‘a hash’) and the details of the previous block’s hash. As an example, if you started with £100 in your account and added a further £10, instead of your block being updated, a new block is created recording the new value of £120. This new block will have its own unique hash and details of the previous block’s hash. Each subsequent transaction will add additional blocks. A chain of information is therefore created with each transaction, making it auditable (Figure 2).

Finally, unlike the traditional banking model, the blockchain is a decentralised system. Instead of one server holding the up-to-date copy of the information, computers all over the world store identical copies of blockchains. Each time new information is added and a new block is created, this information is sent out to every computer that stores the information. Each computer then independently checks its chain to ensure the data and hash details match. At least 50% of the computers have to confirm the data for it to be accepted. Consequently, the system makes it almost impossible to tamper with the data or create fraudulent information. This system of verifying the information is referred to as ‘mining’.

Figure 1 Centralised banking system
The blockchain has created an effective and safe way to store updatable information but how does it have a value? At the most basic level, cryptocurrencies have a value as they can be used to buy products or services. In the UK, Bitcoin can be used to buy store gift cards, airline tickets (airBaltic) or products on the online marketplace Etsy. You can even make your monthly charity donation to the Royal National Lifeboat Institution (RNLI) via the cryptocurrency.

In order to prevent devaluing the currency, the number of new Bitcoins created each year is capped. This capping is also part of the reason its value has increased over the years. As more people look to invest and use cryptocurrencies, the value of this finite resource increases. Some other cryptocurrencies use different systems to maintain their value but this is well out of the scope of a health technology article. Needless to say, the rising value of the digital money is helping the RNLI stay afloat. (Sorry!)

THE BLOCKCHAIN IN HEALTHCARE
Healthcare is becoming progressively more reliant on data. We are now using more and more digital tools and systems to capture and create new patient data. Unfortunately, many of these systems do not interact, and so we have an increasingly fragmented and siloed system. The blockchain could be part of the solution by creating an accessible (and modifiable) secure database of patient information.

The second area is ironically around security. As services like Bitcoin increase in popularity, the number of computers holding the ledger increases and so the likelihood of hackers managing to alter 51% of the ledgers reduces. However, with smaller or early-stage ‘new ledgers’ that risk is much higher and so the data held in a new healthcare blockchain platform may not be as secure as people are led to believe. This would put highly confidential data at risk.

Even more concerning is that the big players such as Bitcoin may not be quite as secure in the coming years. In 2020, IBM made its Quantum computing system available on the Cloud. It is expecting to have its 1,211qubit system available by 2023. We will save the details of quantum computing for a future article but as a reference, this system is 100 million times faster than a conventional computer. For this reason, the processing power could render the blockchain instantly exploitable. In retaliation, the blockchain developers may need to develop their own quantum computing-based ledgers, thereby further augmenting the energy requirements.

THREATS TO THE BLOCKCHAIN’S FUTURE
Although there is general excitement around the increasing uses of the blockchain (including in healthcare), the prognosis of the technology is not all positive. The most commonly reported concern relates to the environmental impact. The power required to maintain Bitcoin alone is 128 terawatt-hours per year. That equates to 0.6% of the world’s total energy consumption! This is ten times more than Google’s entire yearly consumption. Unless efficiency improvements can be made, it is likely that opposition to the technology will continue to grow.

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CONCLUSIONS
It is estimated that Bitcoin alone holds $653 billion. With the security risks having the potential to make the value disappear overnight and with the accelerated global warming effects of this massive power consumption, maybe it is safest to join Dogecoin on the moon in 2022.

WHAT IS CRYPTOCURRENCY?
The blockchain has created an effective and safe way to store updatable information but how does it have a value? At the most basic level, cryptocurrencies have a value as they can be used to buy products or services. In the UK, Bitcoin can be used to buy store gift cards, airline tickets (airBaltic) or products on the online marketplace Etsy. You can even make your monthly charity donation to the Royal National Lifeboat Institution (RNLI) via the cryptocurrency.

In order to prevent devaluing the currency, the number of new Bitcoins created each year is capped. This capping is also part of the reason its value has increased over the years. As more people look to invest and use cryptocurrencies, the value of this finite resource increases. Some other cryptocurrencies use different systems to maintain their value but this is well out of the scope of a health technology article. Needless to say, the rising value of the digital money is helping the RNLI stay afloat. (Sorry!)
Cross-examination
Each month we take a close look at a recent legal case with implications for the surgical profession.

Permission to refuse blood

Robert Wheeler, Director, Department of Clinical Law, University Hospital Southampton, UK

D V was 13 years old when an osteosarcoma was found in his left lower leg. After chemotherapy, he had an above-knee amputation, then metastasis removal from both lungs and then a further right pulmonary metastasectomy. Prior to surgery, he had more than one blood transfusion, which caused him ‘huge distress’ resulting in a subsequent diagnosis of post-traumatic stress disorder. Following these experiences, DV began considering affiliation with the Jehovah’s Witnesses and was ultimately baptised into that church during a period of remission and good health in 2019.

Eighteen months later, DV had a further metastatic relapse in the right lung. He was now 17 years old and faced with a fourth metastasectomy. This was likely to be thoracoscopic but proceeding to a thoracotomy if necessary. DV wanted the surgery but only on the basis that in the event of haemorrhage, no blood transfusion would be given. The anaesthetist was not prepared to undertake the anaesthetic on this basis and after detailed discussion over the following month, a declaration was sought by the trust from the court that it was lawful and in DV’s best interests not to take steps towards the transfusion of whole blood against his wishes.

The court stressed that the relationship between DV and his parents on the one hand and the clinicians on the other was good; the family praised the clinicians in court. This was ‘not in any sense a battle between patient and doctors. Everyone agrees that DV should have the surgery, and soon.’

Although the judge found that DV had capacity to make the decision to consent for surgery, he agreed with the trust that as a minor (therefore not yet an adult), the court had to make a decision on DV’s behalf with respect to the refusal of blood transfusion. ‘It was not a decision that could be left to DV until he reached 18, because that might be too late.’

The court found 12 reasons why avoidance of transfusion would be in DV’s interests, including: the proximity to his 18th birthday (8 months); his clear constant and firmly expressed views; his deeply held core beliefs; the risk of further psychological harm; the low risk of haemorrhage (held to be 1%); the propitious site of the pulmonary nodule and aggressive use of blood conservation; the views of his parents; and the practicalities of compelling him to attend hospital. Taken together, this particular set of facts led to the court approving the treatment plan, avoiding transfusion in the event of life threatening haemorrhage.

This was an unusual decision, probably influenced by the joint approach by trust and family, and DV’s age, experience of cancer and character. Most requests in this context to English courts will continue to be made by hospitals seeking to provide transfusions to this age group. In almost all cases, their application for compulsory transfusion will be declared lawful, to which the parents or child will reluctantly acquiesce. In another 2021 judgement (X [A Child]), it was confirmed by a long line of common law authorities that the court will always take as its starting point the child’s welfare, implying the protection of the child’s life. The court, as a ‘judicial reasonable parent’, is loath to let a child die for want of a blood transfusion.

This judgement makes explicit that until adulthood, children and young people are unable to make the final decision as to whether they will refuse life saving treatment that is clinically indicated. In this relatively non-contentious case, both DV and the hospital were anxious to expedite thoracic surgery but the hospital was not prepared to rely on a 17-year-old’s decision to forgo the use of blood in the way that it would have relied on the decision of a capacitious adult. In the latter situation, the adult’s decision would be determinative, the court having no role in that transaction.

English law remains unchanged. If a child or young person seeks to avoid the use of blood transfusion in a situation where the patient’s life is at risk, the decision must be taken by a court if time permits and it will usually be possible to speak to a High Court judge for this purpose. Almost all cases referred to the court for this reason will result in a decision to transfuse. The decision in DV’s case was unusual; either way, it is the court that always has the last word.
Phyllis George was the first woman to be elected to the Council of The Royal College of Surgeons of England (RCS England), in 1979. She became RCS England’s first woman Vice-President in 1988. A consultant general surgeon at the Royal Free Hospital, she had a special interest in thyroid, breast and hepatobiliary surgery.

Born in 1925, George qualified in 1948, having trained at the Royal Free School of Medicine. Originally the London School of Medicine for Women, it was the first medical school in Britain to allow women to train as doctors when it opened in 1874. George worked at Central Middlesex and Great Ormond Street hospitals before returning to the Royal Free, where she worked with the hepatologist Sheila Sherlock.

George is remembered as an outstanding surgeon and talented teacher, taking a particular interest in the training and wellbeing of her junior staff.

Her portrait followed on from a series of large scale photographic artworks of professional women by Jane Brettle titled Airside, which refers to the area in an airport where the public can only be admitted once filtered through various security checkpoints, where access is not a matter of course. The pieces were influenced by the stillness and confidence seen in portraits of women in the 1700s and 1800s by artists such as Ingres, Raeburn and Reynolds. Brettle’s subjects were photographed in settings relating to their work, with George being portrayed in the Council Room of RCS England. This portrait is now on display on the first floor of the College’s building in Lincoln’s Inn Fields, part of a set of seven portraits of women surgeons by Brettle.
Crossword

Down
2. Cancer of arm by bubble-making device, we hear (8)
3. Ball gladder operation (10)
4. Biased pair and corrupt Hardy character killed (10)
5. Sewing assistant is figure with lisp, by the sound of it (7)
6. Part of the eye virtual assistant lifted up (4)
7. I align jumping antelope (6)
8. Mountain climbing: invigorating if non-physical (8)
14. Tender quality of man the French point after (10)
15. At home and poorly, standing up after cake - a kind of Italian food (10)
16. Dispute involving prisoner, Parisian cop and model (8)
18. US inadequate blood supply is half in California (8)
19. Cancel the score (7)
21. Disease of first Peruvian people in river named after II (6)
24. Speech inference includes mental projection (4)

Across
1. Bawdy place providing body and drug (8)
9. Tropical bird’s note following musical instrument (8)
10. Current male to show force (6)
11. Predicament at eastern resort: call for surgeon! (5,5)
12. Contentious matter? Disease of this named after II (4)
13. Removal of constraint as representatives have initial intubation for ecstasy (10)
16. Rio inhabitant’s shrub envelopes swirling air (7)
17. An emergency room with soldier caught lacking normal immune response (7)
20. Layman’s mild acne on treatment (3-7)
22. Engrave boat missing prow (4)
23. Clean up her spilt Sprite (10)
25. Mystery over morning gastro-intestinal ablation finally with European (6)
26. Loveless person with disease grabbing queen vegetable (8)
27. A lost hip broken in infirmary (8)

A moderately cryptic puzzle by Escort

Crossword 26 solution

Congratulations to Bruno Handel of Brentwood, Essex who won the prize for Crossword 26 in the July 2021 Bulletin. Theirs was the first correct entry drawn from a hat on 13 August from someone who had not won before.

To enter, simply send a scanned copy of your completed crossword to bulletin@rcseng.ac.uk. Good luck!

Win a copy of Operations that made history!
CROSSWORTH Council noted with regret the deaths of the following fellows and members of RCS England

ALI, Dana of LONDON, UK
BHUTIANI, Rajinder Prasad of WATFORD, UK, FRCS 1980
BROUGH, William Andrew of MACCLESFIELD, UK, FRCS 1980
BROWN, Ronald Frank of MIDHURST, UK, FRCS 1956
HARKNESS, William Frederic James of BODMIN, UK, FRCS 1985
HICKSON, Ruth Margaret of COVENTRY, UK, FRCS 1956
KARRAN, Stephen John of ROMSEY, UK, FRCS 1967
KELLY, John Malcolm of SOUTHAMPTON, UK, FRCS 1967
PETERS, Noel Henry of CHISLEHURST, UK, FRCS 1963
RICHARDS, Harold Joseph of ST LEONARDS, Australia, FRCS 1950
SEWARD, Margaret Helen Elizabeth of BOURNEMOUTH, UK, FRCS 1962
SULEIMAN, Mahmood of HIGH WYCOMBE, UK
THE PRINCE PHILIP of London, UK, FRCS (Honorary) 1953
VAN WINGERDEN, Jan Jouke of LEEUWARDEN, The Netherlands, FRCS (Ad Eundem) 2021
WAITE, Ian Mowbray of IPSWICH, UK, FDS 1969
WARDA, Mohamed Mohamed Reda of CAIRO, Egypt, MRCS 2008

Plarr’s Lives of the Fellows

A biographical register of the fellows of The Royal College of Surgeons of England. It can be accessed online at: livesonline.rcseng.ac.uk

If you are interested in writing a fellow’s obituary, please email: lives@rcseng.ac.uk

To report a death, please email: membership@rcseng.ac.uk

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It’s a fact that diverse organisations perform better and innovate more quickly. Knowledge multiplies among people who are able to learn from their differences. That’s why we’re putting diversity and inclusion at the heart of the College’s future. Embracing difference isn’t just the right thing to do. It can inspire all of us to grow. And it will ensure our profession remains at the forefront of patient care for generations to come.

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Together, we’re changing the face of surgery.

Join us.
Slop explores some engendered ideas

Our well-meaning columnist does his best to stay in the loop.

Mr Slop FRCS (Eng)

Mr Slop FRCS, who was watering his roses au naturel, was thinking about his worsening prostatism when his iPhone® went off. It was the Esteemed Editor-in-Chief, himself a urologist, on the video screen. As Slop blinked at the tiny image in the fading light, he must have looked 170 years old to the younger man on the other end of this diminutive miracle of electronic engineering.

‘Hello, Slop! You look as though you must be straining the potatoes, squinting into that device of yours? Sorry about the urological metaphor, old man, but I can never quite switch off from the day job! Ha!’

Little did Slop’s tormentor know how close to the bone (or rather the pubic ramus) he was with his nasty little remark. Slop tried to keep his cool and practise his pelvic floor exercises at the same time as pretending to be amused.

‘Er, hello, Sir? Just the sunlight in my eyes,’ said Slop lying through his sphincters.

‘Well, Slop, I have a commission for you: we are having another Women in Surgery feature in the Bulletin this month! What do you think of that, Slop?’

‘You mean like the one last year, Mr Esteemed Editor?’

‘Well, yes, I suppose it is to keep the subject in the forefront of the fellows’ and members’ minds. We still have a long way to go, Slop! We may have had a woman President but never yet a woman Esteemed Editor!’

‘I suppose not, Sir,’ replied Slop, hoping his tone did not give away his actual lack of interest in who actually occupied the Editor’s chair. ‘But I covered the subject pretty well last year and hopefully showed my support?’ he mumbled as he finally felt the urge to micturate pass.

‘I am sure you can think of an interesting angle, Slop.’

‘Of course. A new angle?’ whined Slop, who could not quite get the image out of his mind of his Esteemed Editor wielding a rigid, but bent, cystoscope high above his head.

‘Good old boy, Slop! I am sure you can do it again. On my desk by Monday morning! There’s a good chap!’

Just at that moment, the signal must have disappeared behind Mount Middle as Slop moved up the path towards the orangery and the jovial rantings of his boss were no longer audible. At least he was alone again to think his own thoughts and he headed towards the house where the Nursing Sister was trying (but failing miserably) to unscrew the top of a bottle of ice-cold rosé on the patio for them to share in the autumn evening sunshine.

Slop, who had always tried to be in the vanguard of ideas, suddenly had a brainwave as he kissed his cheerful soulmate on the cheek. Instead of more on the desirability of females in surgery, he would explore the third sex, the alphabet that went with it and the language that it had spawned. His column would be woke central this month!

That evening in his study, he Wikipeded ‘non-binary’ and learnt that as many as 11% of LGBTQ+ persons identified as TGNB (transgender non-binary). It would thus not be long before there would inevitably be a LGBTQ+/TGNB Practitioners in Surgery group ensconced in an office in the new, shiny Lincoln’s Inn Fields surgical holy of holies. Slop could envisage the Union Jack flying alongside the yellow, white, purple and black TGNB flag on the pole outside the entrance to the College. As Slop read more about this new cluster emerging from the shadows, he learnt that they had lots of names, from genderfluid (which sounded rather unpleasant) to third gender, gender dysphoric, androgynous and genderqueer. There were transmen, transwomen and transfeminine, the latter being those who were assigned male at birth but identify as female, and finally, transmasculine, who were the converse.

Slop, who was undoubtedly a veteran (but not a lover) of committees, had thought that agendas were for structuring a meeting but now found that agender was another word in this new intersex universe where there were also gender outlaws and the neutrois gender, and where persons who feel that one part of their gender identity is static while another part fluctuates in intensity were termed to be in a state of demiflux. Like all groups, the TGNBs had their admirers in the form of skolosexual people, who are sexually attracted to them.

Slop’s head was beginning to spin with so much new information as he tried to make sense of it all. With his newfound vocabulary, he began to pen his piece to the Esteemed Editor. By the time he had managed to get his brain around these new concepts, the bottle of rosé was empty and his head was spinning for an altogether different reason. His conclusions last year in his Bulletin piece on women in surgery were that if surgery could not attract more women, it would wither on the vine. As the product of the vine had been consumed mostly by Slop alone, it was time to send off his piece, drink a pint of water and head for bed.

With a click of a button, he sent off his copy. It landed on the Bulletin laptop just as the Editor was earnestly watching the depressing COVID-19 statistics on the BBC’s News at Ten. When he saw what Slop had sent him in place of addressing the important issue of women in surgery, the worsening pandemic figures seemed suddenly bearable.
Surgical Leadership Program

A year-long certificate program for executive skills development and high-impact leadership, inside and outside the operating room

The Surgical Leadership Program is the Harvard Medical School postgraduate certificate program for surgeons seeking to excel as heads of departments, divisions, projects and institutions.

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- Three workshops at the beginning, middle and end of the program
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