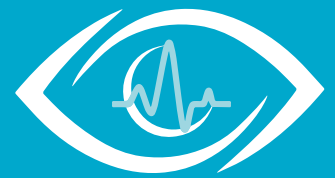


TRAINEE EYE



THE TRAINEE MAGAZINE FOR THE FACULTY OF INTENSIVE CARE MEDICINE

ISSUE 20 | SPRING 2024



Inspirational Intensivists



The Faculty of
**Intensive
Care Medicine**

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Clinical Editor: Dr Waqas Akhtar

Managing Editors:
Mr James Goodwin
Ms Anna Ripley

Sub-Editor: Ms Natalie Bell

Coordinated by: Ms Dawn Evans

Dean: Dr Daniele Bryden
Vice-Dean: Dr Jack Parry-Jones

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Your Lead Trainee Representative



Dr Waqas Akhtar
FICM Lead StR
Representative

This edition of the *Trainee Eye* is themed 'Inspirational Intensivists,' which aptly describes our colleagues who tirelessly ensure that our patients receive the best care despite the challenges faced by our struggling healthcare system.

As the new editor, I am honoured to include deeply inspirational and moving stories from our own intensivists in training, and I thank them for sharing their experiences. Additionally, we have introduced a new section where you can meet and hear from the incredibly hard-working members of the StR Sub-Committee, which will soon celebrate its two-year anniversary.

Committee updates

Firstly, I would like to welcome Rosie as the new Deputy FICM StR Representative. She brings extensive experience and has already dived deep into the main issues we are facing with a strong resolve. Her appointment will be an asset to us all. Some of our StR sub-committee members are reaching the end of their terms so I would also like to thank Gareth (our single ICM representative), Tae (our dual anaesthetic and ICM representative), Helen (our academic and LTFT ICM representative) Sofia (our dual/triple ICM and medicine representative), Helen (our co-opted Scottish Intensive Care Society trainee committee chair) and Fran (our co-opted Intensive Care Society trainee advisory group chair) for the fantastic work they have done. We received many excellent applications

to take on these roles and have just appointed four fantastic new members Giada Azzopardi, Luke Flower, Stuart Edwardson and Alex Maidwell-Smith. I am very much looking forward to working with them all to improve the lives of intensivists in training.

StR Survey

At the end of last year we released the results of the 2023 StR Survey, which highlighted four main areas around portfolio, training challenges, job planning and issues with CCTs to address (a summary can be found on page 5). We would like to thank everyone for taking their time to share their experiences, and the trainers who contributed to the positive experience of many trainees. We have established workplans in all these areas and some of these initial interventions are described here and by the StR Sub-Committee members in the following reports.

Regional Representative network and national reporting system

Over the past few months we have integrated the Regional Representatives into the national committee and created a **national reporting system**. We have already discussed a wide



Don't forget to complete the **GMC 2024 National Training Survey**

range of issues including the pragmatic implementation of the curriculum, dedicated training time, airway experience, focused ultrasound and wider discussions around new ways of working with our ACCP colleagues, culminating in the **statement and FAQs** published last month. We held a joint session with the Chair of the Training, Assessment and Quality Committee (FICMTAQ) and the Chair of the Careers, Recruitment and Workforce Committee (FICMCRW) to directly address concerns raised via the intensivists in training network, and work is in progress to resolve these.

Actions

We cannot emphasise enough the importance of engaging with your regional representatives. In response to issues raised, the FICM created the **'Training Best**

Practice' page on the website to guide local trainers and trainees to the pragmatic implementation of training, ARCP requirements and rotations. After recent trainee reports, we are working with the JRCPTB to look at issues around triple accreditation and CCT dates. The RCoA and FICM have also collaboratively published a **document addressing anaesthesia experience for single and dual medical/emergency medicine ICM CCTs**. We hope to add to this pragmatic training guide, but key is that you continue to bring issues to our attention.

Robust trainee representation

Importantly I would like to assure our StRs that we have heard your views on many topics affecting doctors today, such as the NHS workforce plan and are making

robust representations on this to the FICM Board. There is a lot of ongoing activity behind the scenes to address many of these things. The results will hopefully be positive and be reported to you in the near future.

Upcoming

The FICM Annual Meeting this year will hold a trainee-led 'Dragon's Den' on the implementation of new technologies within the NHS (of which ECPR has my unbiased vote), as well as an opportunity for you to hear from the Board at FICM amongst a great programme. Come and join on Friday 19 April 2024 in London.

As always, please do contact me directly if you feel I can help at waqas.akhtar@nhs.net

1 Positives!



- **Most respondents reported that they are either satisfied or very satisfied with their overall training experience.**
- We will seek to actively enhance those areas of training highlighted as good or outstanding and share them as examples of best practice.
- We will seek to engage and formalise lines of communication between the elected ICM Regional Representatives, FICM StR Subcommittee and the Regional Advisor Network. This will include regular ICM StR involvement in the regular Training Leadership Annual Meetings (TLAM).

2 Portfolio



- The Faculty will seek to provide additional resources and guidance on portfolio building to alleviate the burden on DiTs.
- Steps will be taken to ensure that guidance is followed in a consistent and pragmatic approach across regions via regular communications to the Regional Advisor (RA) network.
- A regularly updated frequently asked questions (FAQ) resource on the FICM website will be created in conjunction with the StR Subcommittee to provide up-to-date guidance for both StRs and trainers.

3 Training challenges



- Issuing guidance on the need for pragmatic and flexible rotations. This should follow the ethos of the outcome-based curriculum thus allowing flexibility in time and location.
- A new reporting mechanism to be set up in 2024 by the StR Subcommittee and regional representative network alongside the Lead RA to report issues that cannot be handled locally.
- Updated resources around Special Skills Year (SSY) rotations, alongside guidance on the process of creating a new SSY.

4 Job planning



- As a priority, we will engage with trusts by providing more information on and awareness of suitable job plans for ICM StRs from all backgrounds.
- Provide materials on how these posts can be constructed.
- Provide examples of workable job plans for trainees pursuing a career in ICM alone or partnered with another specialty.
- Regional Advisors will be asked to seek to identify a suitable mentor within each trainee's own region or a nearby region from which they can seek advice.

5 Dual and single CCTs



- We will continue to work to ensure colleagues are aware of and are taking steps to address the concerns highlighted. The findings of the survey will be presented at the Training Leadership Annual Meeting (TLAM) in 2024 for discussion and communication to all regions to raise awareness.
- We encourage trainees to report any issues with regards to unequal training opportunities within regions to their local FT and/or RA in the first instance or to the StR Subcommittee.
- Increased guidance will be issued on the nuances of dual or triple CCT training.

Your Deputy Trainee Representative



Dr Rosie Worrall
FICM Deputy Lead StR
Representative

I would like to start by thanking everybody who has supported me over the last six months and wishing Matt well in his future ventures. I am really excited to be taking on this role and working alongside Waqas, the FICM Board, StR Sub-Committee and Regional Representatives to continue to improve access and quality of ICM training across the UK.

I am a less than full time, dual anaesthesia and ICM ST7 in the West Midlands. I live in Birmingham with my two children and husband. Outside of work I am busy juggling the school run, spelling tests and endless children's birthday parties (I should have shares in Smyth's Toy Shop!). Clinically, I have an interest in research and am coming to the end of a project modeling postoperative acute kidney injury risk in major, elective surgery. I am also passionate about improving the training experience, and over the last few years have taken on several trainee management positions encompassing trainee wellbeing, less than full time training and most recently as Regional ICM Rep for the West Midlands.

Trainee Wellbeing

For want of a better title I consider myself to be a 'Wellbeing Advocate'. However just saying that really makes me cringe. As I've learned more about it, I've come to dislike the term 'wellbeing'. I find that it is

often a buzzword that is overused and underappreciated. Real wellbeing strategies identify those in a community who are struggling or simply surviving and help them to thrive, whilst still supporting those who are already succeeding. When we talk about improving morale, retaining doctors, optimising training opportunities, minimising rotational training, addressing differential attainment, increasing flexible hours, accessing hot food/rest facilities/car parking, pay... what we are actually talking about is wellbeing! It isn't all yoga and mindfulness, although offering psychological, pastoral and mentoring support is still an important part. Unfortunately, very few of the issues highlighted above have quick or cheap fixes, but they are what we should continue to advocate for on local as well as national levels.

Aims

In my 'Intention To Stand' statement I talked about improving access to ICM via both training and non-

training routes, simplifying the training pathway itself, solidifying the regional representative network and standardising experiences across the UK. Over the last few months I have learned that there is already a huge amount of work underway at FICM in these areas, but I am keen to continue to improve input from the FICM membership and increase transparency about what happens 'behind the scenes'.

In January, Waqas and I hosted a meeting for the regional representatives, and in February, they met with the chairs of the Careers, Recruitment and Workforce Committee and Training, Assessment and Quality Committee. We have further plans for both a face-to-face rep event in the summer and a trainee conference towards the end of the year. Finally both Waqas and myself are very happy to be contacted via email if there is something with which you think we can help or which you would like to be involved in.

Meet the newest members of the StR Sub-Committee

Meet the newest members of your FICM StR Sub-Committee.



Dr Fraser Waterson
Dual ICM & Emergency
Medicine Representative

Hi there, I'm Fraser Waterson, a Stage 3 ICM trainee in South-East Scotland, and the current Dual ICM and Emergency Medicine representative on the FICM StR sub-committee.

Originally from just outside Glasgow, I completed my Foundation training in Forth Valley before undertaking a clinical development fellowship in emergency medicine and obstetrics, where I got a taste for QI and a chance to attend the Medical Leadership Academy. In 2016 I moved further east to Edinburgh to take up run-through training in EM and following my ACCS years applied for dual training with ICM ... and haven't looked back since!

I am passionate about systems improvement, enhancing team performance, trainee representation and workplace civility and wellbeing. Along with my FICM StR Sub-Committee role, I am a member of our local ED's wellbeing team and also a Chief Registrar in my current health board.

I have an interest in guideline development and adding to the armoury of resources to help us master some of the challenges in delivering critical care in high acuity circumstances (and often in the small hours!) and have enjoyed developing guidance locally whilst also working with FICM on some of the 'Midnight Law' publications.

Dual training with EM has unique challenges - with rotas, front-door workload and portfolio to name a few, but we also bring a wide range of valuable expertise to the critical care environment and are no longer a minority in the incredible melting pot of intensivists. Shared understanding of the challenges different trainees face in delivering critical care across the hospital (and in some cases outside it) is essential to improve not only patient care, but also the training experience. This is one of the greatest advantages of the StR sub-committee and I look forward to our continued work together; and continuing to advocate for EM trainees within FICM.

I am an ST8 in Acute and Intensive Care Medicine in Liverpool. I am an International Medical Graduate (IMG) from Sudan and joined the NHS at ST3 trainee level. I encountered a few challenges to accommodate for the changes in system and culture. I am currently the FICM IMG StR lead and the NHSE NW (previously HEENW) IMG lead.

I am working on developing resources for FICM to provide information for IMGs when they first arrive to their first ICM post, how a non-trainee IMG could join training, and what essential criteria they have to fulfil to progress to join the ICM CCT programme. In addition, there will be recommendations for trainers supervising IMGs in ICM including, how they could get generic skills and airway competencies signed off, and how the recruiting intensive care units could prepare to integrate IMG intensivists into the system.

We have an exciting time ahead for IMGs.



Dr Taqua Dahab
IMG Representative



Dr Chris Jacobs
LLP Representative

My name is Chris and I have recently been appointed to a new role on the FICM StR Sub-Committee looking at how we can develop the LLP platform.

I graduated from The University of Manchester in 2012 and with the exception of completing my core training in the East of England, have spent the rest of my working life in the North West. I am a single-specialty ICM trainee looking to combine this with a portfolio career in medicine and I am currently spending my SSY year working in respiratory medicine. I have a background in web development and design and hope to bring these skills to my role as LLP representative. I am enthusiastic about the use of technology to enhance training and am keen to improve the usability of the platform, addressing some of the less intuitive areas and providing an ICM perspective to future developments.

When I'm not in work you'll find me keeping fit, walking in the Lake District (which I am very lucky to have on my doorstep!) and spending time with my wife, my increasingly energetic three year old and two dogs. Please reach out if I can be of any help, particularly if you have any ideas about how we can make LLP better!

Updates from the StR Sub-Committee

I'm a dual trainee in ICM and Anaesthesia in the West of Scotland. I grew up and mostly trained in the North West of England and came to Edinburgh for Core Anaesthetics in 2015. I love living and working in Scotland. As chair of the Trainee Committee of the Scottish Intensive Care Society (SICS), I was delighted to join the FICM StR Subcommittee as a co-opted member. This is a fantastic initiative to engage with ICM trainees and has developed over the two years since its inception, covering many issues key to training and the ICM workforce. At the same time, SICS has been delivering education, such as our conference and online evening updates, and representing the workforce in Scotland. I'm coming to the end of my term now but I'm looking forward to seeing the outcomes of the projects I've been involved in. These roles have given me a real insight into the process of enacting change (it's not easy) and the considerable efforts of all members of the ICU MDT to improve care for our patients.



Dr Helen French
Chair, SICS Trainee Committee



Dr Tae Lee
Dual ICM & Anaesthetics Representative

Hi I'm Tae. I currently serve as the Dual ICM and Anaesthetics StR Representative. I am honoured to represent our large cohort and keen to hear our views, challenges and feedback that I can address to our committees. For this, we have set up a WhatsApp group, or you can email: tklee@doctors.org.uk.

Outside of this, I am an ST7 Mersey trainee and I co-chair the RCoA Anaesthetists in Training Representative Group.

FICM Dual Anaesthetic Trainees National Group
WhatsApp group



I am the academic and less-than-fulltime representative on the FICM StR. I am currently undertaking a post-doctoral academic clinical fellowship at Plymouth University, which I am attempting to balance with dual ICM-anaesthesia training and looking after two children under two years old!

My aim in joining the subcommittee was to develop a greater sense of community among academic ICM trainees nationally, and a means by which we could identify and contact each other for advice and collaboration.

I hoped to create a FICM-held registry of ICM trainees currently undertaking a formal research role such that there could be a central database where the future destination of academic trainees could be analysed. We are in discussion about how to use the LLP to collect this information.

Currently, we host an informal Whatsapp group, and held a listening event in November 2022, which identified common issues experienced by academic trainees within the ICM programme. We fed this back to the FICM training committee, where it formed part of the newly published [FICM guidance on academic training](#). If you are an ICM trainee, currently undertaking (or considering) a formal research role, please do get in touch at helen.mckenna4@nhs.net so that we can add you to our community. I would also encourage all ICM trainees to join the [TRIC network](#); a network of ICM trainees facilitating national audit, QI and research projects across the UK.



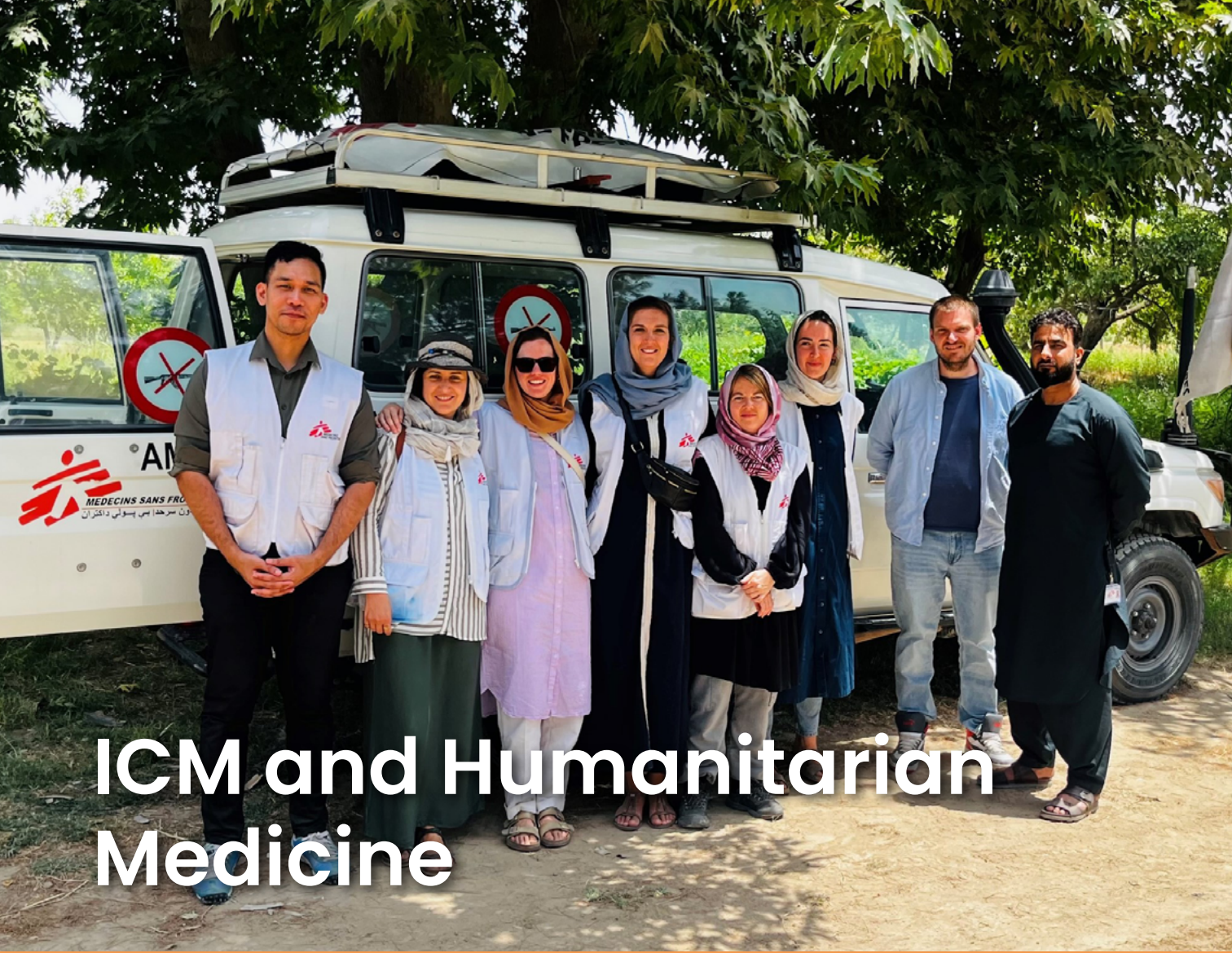
Dr Helen McKenna
Academic & LTFT Representative



Dr Sofia Hanger
Dual/Triple ICM & Medicine Representative

Over the past year the focus has been on getting the StR training survey out and then helping identify the main themes to be addressed following all the very helpful feedback we received.

As a committee, we are still working hard to advocate for changes based on these results to improve the trainee experience. In addition, there has been a new GIM curriculum introduced, which many triple CCT trainees are still trying to navigate and I have been trying to help smooth this transition wherever possible.



ICM and Humanitarian Medicine



Dr Khairil Musa
Senior Clinical Fellow
(Guy's & St Thomas' NHS Foundation Trust)
& ICU Field Doctor
(Médecins Sans Frontières)

I first learnt of Médecins Sans Frontières (MSF) almost two decades ago at the University of Sydney, distinctly feeling out of place as a recent high school graduate, trying to figure out who I was and where exactly I belong. Like many moments that come to define your future the day began rather uneventfully, every few weeks in between lectures on anatomy and pharmacology, guest speakers would come who shared anecdotes of their careers in hope to entice impressionable young minds. That day's guest speaker was a burly man who firstly described himself as a humanitarian then continued to introduce himself as an emergency physician working for MSF.

He proceeded to share some of the most extraordinary things I would hear: how he travelled to the most austere and forsaken places around the world under the cover of gunfire, navigating checkpoints and landmines to help provide medical care to those in dire need. During his 30-minute talk a seed was planted that would take me to where I am now, a humanitarian and ICU doctor working for one of the biggest medical humanitarian organisations in the world. I am in my fourth year working with MSF; I have since worked in five missions across Yemen, Iraq and most recently Afghanistan.

Application process

My application process for MSF began in July 2019 and feels inconsequential now but was undoubtedly at the time quite stressful. The governance structure of MSF is slightly confusing though basically your country of residence would determine which MSF section you would apply to, each with its own requirements and recruitment process. As an Australian resident I firstly had to attend a recruitment drive organised by MSF Australia to learn about the organisation and to hear from recently returned fieldworkers. Following this I had to submit an online application detailing, amongst other things, my skills and professional experience, time working or living in low resource settings, as well as previous leadership and educational experiences. After the online application I was invited to the longest interview I've ever done (approximately 90 minutes long) where a senior MSF recruiter explored my motivations, ability to manage stress, whether I

was a team player and my understanding of MSF's charter and governance structure.

Fortuitously at the time, being a trainee in my final years of training with the Australian College of Intensive Care Medicine (CICM) gave me a solid foundation and skills that would serve me well in my missions. These included how to be the calm in the centre of chaos, how to navigate conflicting personalities whilst working towards a common goal and how to connect and communicate with those from diverse backgrounds. Though as prepared as I thought I would be, many moments would humble me, and I would learn some of my biggest lessons in the field.

Médecins Sans Frontières

MSF was founded more than 50 years ago, on the 22 December 1971, in the aftermath of the Nigerian civil war and Biafran famine, by a group of French doctors and journalists. The birth of MSF would lay the foundation for a new form of humanitarianism that would prioritise the welfare of those suffering over political or religious boundaries.

Beyond the crucial medical care that MSF provides all over the world, advocacy is also an important component of our work. *Témoignage* from the French "to witness" is a core value of MSF and involves the willingness to speak out about what we see in the field, to raise awareness and to call out injustice on behalf of those MSF assists. MSF was created on the belief that all people have the right to medical care regardless of gender, race, religion, or creed. This neutrality

and impartiality in the care we provide also form essential pillars of MSF's work. Now, at what feels like a time of great turmoil around the world, this work has never felt more important. MSF now has a staff of 65,000 people working in more than 80 countries worldwide. The staff provide essential medical care in all kinds of situations, from vaccination campaigns to emergency care during natural disasters.

Deploying intensivists

Deployments with MSF will vary depending on profiles and can range between four weeks to 12 months. Traditionally GAS (Gynaecologist/Anaesthetist/ Surgeon) profiles tend to do the shortest deployments due to the intensity of the work and the heavy on call responsibilities (typically 24/7 on call for the length of deployment).

Intensivists are one of the newest profiles MSF began recruiting during the COVID-19 pandemic and there continues to be good demand for Intensivists in the field. MSF recognises the versatility of this profile and would deploy them to projects as clinical leads to help manage the emergency rooms, inpatient wards, and ICUs as well as to support the operating theatres when required. MSF will aim to deploy staff to places where their skills are most needed whilst also considering their preferences.

Whilst it is not generally possible to choose a country or mission, MSF will respect one's decision to not go to a specific country or mission whether due to security concerns or for any other reasons which can be completely personal. My previous

deployments varied between the shortest being five weeks (Iraq) and my longest mission was three months, incidentally also my first in Yemen.

First deployment

I was flown into Aden, Yemen at a time when the world turned, early in 2020, tasked with opening MSF's first COVID-19 Treatment Centre and ICU with a small team of clinicians, administrators, and logisticians. I felt privileged to see MSF at its finest, opening a field hospital in an abandoned community hall, working with Yemeni staff to set up a 32-bed inpatient ward and seven bed ICU. Within days of opening though the realities of what we faced became clear; my excitement would rapidly turn to despair. Managing a pandemic in a warzone would prove to be a herculean task, especially considering we were one of the only health facilities managing COVID-19 patients in the first wave of the pandemic in the South of Yemen.

Supply challenges and limited access to PPE, oxygen, essential drugs, and equipment were some of the many problems we faced. Strangely, working in a Level 3 ICU in an austere setting was not dissimilar to back home; assessing and treating patients with multiorgan failures, sepsis, and shock with the help of the local doctors and nurses. I was also part of the hospital administration team: managing rosters, writing protocols and guidelines, and obtaining data for quality improvement. Some of the differences though include navigating less than ideal living conditions, extreme weather, homesickness, and the ever-looming security threats.

Even as we tried our hardest to treat as many people as we could, by far the hardest thing we faced as a team was the scarcity in resources available to treat the volume of patients who came to the hospital. Not just in terms of beds or ventilators but also in terms of other specialists like dieticians or cardiologists, essential in the care of the critically ill patient. Ultimately, we would see mortality rates that would far exceed those in other developed countries and the city would report an eight-fold increase in the daily death rate compared to before the pandemic. I witnessed it first-hand, hundreds of patients would die in our hospital and ICU. It was during the quiet moments rarely found where I would learn how difficult it was to keep your humanity in the face of insurmountable suffering. For the first time in my life and career it felt like my heart was not big enough to hold on to the darkness I witnessed.

Purpose

My first deployment with MSF undid me in a way I can never fully articulate. Although it took a long time to put myself back together again, it was in Yemen where I finally found my purpose and where I belonged. The obstacles we faced as a team were too many to name, despite it all, the singular thing that overshadows the negatives is the very human experiences you encounter. Learning about and gaining insight into places and cultures you would otherwise not get to see and meeting some of the most generous souls working against all odds to make things better for their people were the biggest positives. I can imagine

how easy it would be to be filled with anger and bitterness that the lottery of birthplace would determine the kind of life one lives. On the contrary, I have met people with such light that it would overcome the darkest voids, who would share what little they have so freely as if generosity is the only way to say I am bigger than what you see around me. Even now, halfway through completing my fellowship in London, I think fondly of my time away and count the days till my next deployment.

A dear friend and fellow MSF doctor once said "you leave your heart in every place you go on mission", and nothing could be truer. My time with MSF reminds me each day that our humanity lies in our ability to care for others, to be the voice for the voiceless and to stand up for those marginalised and vulnerable.

"Your days are numbered. Use them to throw open the windows of your soul to the sun. If you do not the sun will soon set, and you with it." – Marcus Aurelius

My journey into Medical Leadership



Dr Fran Tait
Consultant in ICM

I have just completed my first week as a consultant, something of a relief after nearly 14 years (mostly) in post-graduate medical training. During that time I have held a variety of leadership roles, most recently as chair of the Intensive Care Society's Trainee Advisory Group. This role has allowed me to grow as a leader in the non-clinical setting and develop many transferable skills.

Managing unpopular opinions, practicing diplomacy and the art of negotiation are just some of the skills I have already put into practice. I have also been lucky enough to organise and speak at sessions at a national conference, deliver reports and updates to the ICS council, chair meetings, and contribute to publications. At times this has given me a sense of continuity, value and purpose that has felt lacking at points during training.

How the journey started

So how did I get to this point? I began as a core trainee with local representative roles, putting myself forward for elected positions (sometimes unsuccessfully) then towards the end of maternity leave I put myself forward for the role on the ICS trainee committee. I was quite surprised to find myself with a national representative role and struggled a bit to find my feet initially. But once I had a project to get into, I found my way slowly.

To anyone wanting to start out in a leadership position, I would say just put yourself forward for local roles, the worst that can happen is that you are rejected this time, but you can always try again.

Leadership coaching

We are told we are all leaders, but that seems to come to some people more easily than others, I would count myself in the latter group. Something I found incredibly useful was one to one coaching with a psychologist that I had whilst on the ICS LeaP 2 leadership course, this helped me to talk through things I found challenging about leadership, simple things like how to be effective whilst leading the ward round, or how to manage uncertainty as a leader. Feedback has also been very useful in shaping how I behave as a leader, positive comments have been really constructive in shoring up shaky confidence at times and the less positive ones have caused me to reflect and work on changing.

I have found myself wondering sometimes when listening to talks about leadership, how can I be true to myself and be a leader? Often this is because role models have been limited, or the speaker seems to be very different to me, although this is changing slowly. I feel that fundamentally whilst I can always work on myself, I can't change who I am, so I am trying to stay as true to myself as possible, as the alternative of trying to act how you feel people expect is exhausting.

Putting yourself forward

So if you are thinking about putting yourself forward for a leadership role, I would say do it! Disappointment is better than regret. If you are struggling with the idea of becoming the leader you feel you are expected to be, then gathering some feedback and reflecting on it might be useful. Many people are not as confident or secure as they appear to be, and you are not alone!



Expedition Medicine



Dr Andrew Cumpstey

ST8 Dual anaesthetics & ICM trainee in Wessex

Member of the UK's Association for Mountaineering Instructors

Refuelling and servicing powerboat engines at 1am might not be everyone's idea of a fun way to spend their leave. The sun never sets during Arctic Summer though, and on busy expeditions, the jobs never seem finished either! This expedition to remote Greenland was supporting National Geographic, filming top rock climbers Alex Honnold (of *Free Solo* fame) and Hazel Findlay attempting the first ascent of one of Earth's tallest rock faces.

Ingmikortilaq's north-face rises vertically out of clear blue water at the distant end of our planet's largest sea-fjord system. A glistening conveyor belt of icebergs gently floats past its base in complete silence. It's simply one of the most beautiful places I've ever seen.

Truthfully, expedition medicine is rarely glamorous and is not without its challenges. The work is usually unpaid, and the responsibility of looking after a large (and in this case, famous) team undertaking adventurous activities in remote locations, with minimal support and equipment, is not to be underestimated. This often

comes after swapping many shifts to create the leave, and hours of work between shifts writing risk assessments, planning medical kits and screening medical forms. Yet despite those minor downsides, I definitely think it's worth it!

Expedition medicine has given me many special moments in stunning places with new lifelong friends. Watching a huge iceberg calve in two in front of me was a breath-taking experience (and a wobbly one when the waves hit our boat!). Similarly, seeing Nordvestfjord turn golden as the sun dipped behind a ridge for the first time in late Summer is something I'll never forget.

Transferable skillset

The skillset of an intensive care trainee lends itself well to expedition medicine and in return you bring back invaluable transferable skills. Calmly dealing with the unexpected becomes routine. In this case, 18 months of meticulous planning became

useless within hours of arriving in Greenland as the fjord was unseasonably full of ice and impassable by boat. Having to helicopter in blew all the contingency budget and days for the whole six-week expedition in the first 48 hours. Poor weather threatened the schedule further, with food nearly running out when an ice-cap supply depot became inaccessible in deep snow.

On a successful trip I won't open the medical kit at all, but that doesn't mean I won't be busy. You need to be willing to muck-in around camp, from re-building broken stoves and going on daily water collecting runs, to teaching first aid to local hunters and other team members – all extra skills are useful.

Being competent in the expedition environment yourself is probably the most essential skill. You can't look after others if you can't look after yourself first. Build experience exploring the UK's wild places before adventuring further afield.

Many universities and companies now offer expedition medicine or outdoor leadership courses (e.g. Mountain Leader). Start on trips with bigger companies/charities where a second more experienced expedition medic can support. Above all, give it a go! Coming back from a safe and successful adventure is one of the most fantastic and rewarding feelings.

Arctic Ascent with Alex Honnold is now on Disney +.

Unexpected Journeys: From Anaesthesia to Maternal Critical Care



Dr Christopher Acott
ST7 Anaesthetic & ICM
Trainee
John Radcliffe Hospital

While always determined to be an anaesthetic intensivist as far back as 2011; since starting as a doctor in 2014 I never thought I would be interested in obstetric anaesthesia or maternal critical care. Yet here I am ten years later, a promoter for maternal critical care and the trainee representative for the UK Maternal Cardiology Society. How did this come about? Let me share some stories.

It was a cold, dark and wet April evening. A primiparous lady was labouring in Room 10. The cardiotocograph ticked out ever slower with each contraction. Fear widened her normally stoic eyes. She was a doctor herself, a paediatrician in fact, and she dreaded what those decelerations meant. She could not have an epidural and each minute became harder and longer than the last. Eventually she was brought to theatre. A difficult combined spinal epidural was sited with only the ever-slower tock, tock, tock of the CTG echoing in the silence. With the unfelt snip of an episiotomy and the pull of Kielland's rotational forceps, my son was born. Thankfully neither my wife nor my son had to go to Intensive Care. However, I will not lie, in those few moments I truly thought I would lose both my wife and child in one fell swoop. This is not a unique story; in fact, I am sure many of you know of a similar recollection.

Perhaps more disquieting would have been a different case regarding another primiparous woman. She delivered a 23-week preterm baby boy via perimortem caesarean section. Almost simultaneously, her lips became pale and I felt her skin cool beneath my blue nitrile gloves. Her laboured and rattling breathing ceased. I slowly released the jaw thrust that no longer provided any conduit to ventilation, letting her go in line with her advanced care plan, just as her living boy came to her still chest. This was huge undertaking for a highly skilled and multidisciplinary team and it finally came to a close. She was barely an adult herself but, like so many of us, wanted everything for her son.

The dichotomy of maternal critical care

I hope these two short cases demonstrate the dichotomy of maternal critical care. On the one hand clinical events and morbidity

are common but on the other, ICU admission, significant harm and particularly death are rare. In the UK childbirth has become much safer over the years. MBRRACE-UK note a mortality of 10.9 per 100,000 in their 2018-20 report, significantly lower than the global average of 223 per 100,000 and in particular the lifetime risk in West and Central Africa where it's as high as 1 in 27 according to UNICEF. Though it also worth noting the current UK maternal mortality has increased in the last three-year report even if deaths from COVID 19 are excluded.

Even in previously fit and healthy individuals, in arguably one of the best health services, in one of the wealthiest countries, home to incredible institutions such as the NHS, MBRRACE and UKOSS, childbirth still comes with risks. MBRRACE note several ongoing themes in the UK, particularly the wide discrepancy in maternal mortality with race and social

deprivation. In the most recent 2019-2022 report Black women are 3.7 times more likely to die than their white counterparts, Asian women 1.8 times more likely and those from a more deprived background 2.5 times. Additionally, it is imperative to appreciate that the morbidity associated with maternal critical care is likely to have significant socio-economic and mental health impacts on these patients and their families.

A growing interest

Navigating a growing interest in maternal critical care has been difficult. I have leaned heavily on some wonderful colleagues, consultants, midwives, obstetricians, medics and anaesthetists who have allowed me to engage in several ICU and delivery suite based educational experiences, opportunities and projects. With this I realised that maternal critical care held everything I loved about ICU in distilled form.

High acuity risk-benefit decision making, multidisciplinary team working, patient education and communication, practical procedures and diagnostics including echocardiography, resuscitation and consideration for pregnant and recently pregnant physiology and pharmacology. My previous experience as an ultrasound fellow with Level 1 echo accreditation helped to tie my general adult and maternal critical roles together further with ongoing advocacy of POCUS in the delivery suite for diagnosis of undifferentiated shock and respiratory failure.

UKMCS Trainee Representative

I never expected to be elected in my current role as the UKMCS trainee representative when I first applied. Having a national committee role has helped to broaden my appreciation of maternal medicine and the

stakeholders involved as well as further opportunities in education and trainee advocacy. It has also afforded me insight into the processes behind pre-publication national guidelines and position statements; recently including guidelines around assisted reproductive techniques and care of pregnant patients with implanted cardiac pacemakers and defibrillators. I spoke at our AGM and was able to attend the UKMCS annual conference both of which were held last November to great success. We are looking forward to our first trainee meeting covering maternal cardiac emergencies on the 22 April and hope you will be able to join us!

I highly recommend any similar role to all trainees to gain these benefits that are not always so evident in training. Please contact the Faculty who can send on any questions or just for networking of likeminded individuals!

Space Medicine: Applied Physiology in the Extreme Environment



Dr Sindujen Sriharan
Registrar in Diving &
Hyperbaric Medicine
Alfred ICU, The Alfred,
Melbourne, Australia

I am an anaesthetics registrar and intensive care doctor from London, currently working as a diving and hyperbaric medicine registrar at the Alfred Hyperbaric Unit in Melbourne, for a year. I was an anaesthetics registrar in London working in transfer medicine before moving to the Alfred Hospital in February 2024. I have taken the scenic route in training; I have worked in emergency medicine, intensive care and anaesthesia prior to this which has lent itself nicely to my keen interest in space medicine.

My interest in applied physiology and the clinical application of this knowledge, specifically in the space environment began in 2011, when I completed a space medicine workshop at the European Space Agency in Cologne, Germany. I was fascinated by this new side of medicine and how concepts we have learnt over the years have shaped the way astronaut healthcare is delivered. My interest in this extreme field of medicine continued to develop and I went onto complete my Masters in Space Physiology and Health at King's College, London in 2019. Here I delved deeper into the effects of spaceflight including G-force physiology, austere environment psychology and the clinical effects of long-term spaceflight.

Research into CPR methods

In particular, my interests lie in the management of emergencies in space. My research specifically investigated CPR methods in hypogravity simulation. Due to the reduced effective weight when in zero gravity or reduced gravity environments (like that on the Moon and Mars), adequate CPR may be difficult to provide. We used a bodyweight suspension device (BSD) to help offset our weight and test these different gravity conditions. From our research, it was clear that CPR is very difficult to carry out effectively when we reduce the effect of gravity. Numerous CPR techniques have been proposed by NASA and other research groups to try ensure adequate CPR can be performed. Automated chest compression devices may be a good solution but there are a number of potential issues when using them in the space environment.

ICM and Space Medicine

There are many similarities with Intensive Care Medicine. We see patients that are at the extremes of their health. We use and apply medical and physiological concepts to try and help them. With space medicine, you are using applied physiological concepts to ensure the best outcomes for astronauts – whether this is mitigating the severe bone loss associated with zero gravity or the orthostatic intolerance upon return to Earth. In addition, there are numerous concepts that translate well to terrestrial medicine which can help patients, including the use of POCUS and telemedicine.

Transfer

Working as a transfer registrar in London, part of the London ACCESS service, has been very eye-opening. Not only does it allow the application of your clinical and procedural knowledge, but the key thing I have learnt is the importance of logistical planning, communication and human factors when in an unfamiliar environment and with a smaller team. It is interesting to compare this to the space environment, where for medical evacuation/repatriation, the utmost planning with regards to timing and logistics are required to ensure safe transit of an astronaut back to Earth. We have not yet seen the transfer of a critically unwell patient from space but this future may not be too far away.

Renewed interest

There has been a renewed interest in spaceflight due to companies like SpaceX and Virgin Galactic. Over the next 20 years, I expect there will be

a change in demographics of space travellers – from fit, pre-habilitated astronauts to affluent, older members of the public with potential co-morbidities like heart disease and diabetes. This means that the understanding of space physiology and health will need to grow even further as we strive to understand this extreme environment and its effects on us as terrestrial beings. Intensivists and anaesthetists are well placed to understand the medical issues that these space travellers may be subject to and provide the appropriate care. The main ways to delve deeper into this subspecialty area in the UK include research, MSc study and space analogue missions.

My training thus far has allowed me to keep my hand in aerospace medicine whilst training in anaesthesia and intensive care. The similarities between these specialties have allowed me to stay interested throughout my career and continually grow. I am currently working as a diving/hyperbaric registrar which again is allowing me to work in this extreme environment whilst using applied physiology to medically treat patients.

Do Mucolytics Work in Ventilated Patients?



Dr Daniel Law
ST5 ICM Trainee
Royal Glamorgan
Hospital

Before I talk about my experience of the research Special Skills Year (SSY), I thought I should talk about why I chose to single train. The SSY is actually what swayed me finally in my career choice. It is a tough choice to not continue another specialty and a choice that, like many of my peers, still plays on my mind. For me I knew my focus was working in ICM and I wanted to give it my full attention.

The SSY offers an opportunity to develop a skill specific to the specialty, that you can offer your future workplace. For that, I cannot recommend it enough. Whether you're involved in research currently or pleasantly oblivious, it is an enormous part of critical care. I decided to focus on where divisions in opinion are and mucolytics came to mind immediately. It was recently found that only 4% of units across the country have a guideline on their use!

The journey from generating a question to study design seems scary but allow me to de-myth aspects of taking part in research. Firstly, you aren't expected to know everything. Like many of you, if you ask me about statistics I will tell you what I learnt from MCQs for the exams, then I will draw a blank. This does not rule you out from taking part though! Research is a team sport and the team is massive.

From networking via my supervisor I was introduced to a professor

in sputum rheology. We quickly refined the clinical question, created a study design and had a rough protocol. Many mucolytics are licensed for the reduction in sputum viscosity. Well, now I have a team who can tell us if they actually do that!

My study, which I have affectionately named VISCOSITY-ICU, is an observational study. Samples are being taken daily whilst a patient is ventilated. These samples will be directly measured for their viscoelastic properties, alongside studies for molecular changes via FTIR spectroscopy. Patients will be grouped based on mucolytic medications they happen to have administered. There are a lot of answers I hope to generate, including to see if molecular changes would even warrant the use of carbocysteine. If this provides useful results then the next step will be an interventional trial. I was worried about funding, however, when I looked a few sources came up. There was even one pool of

funding for trainee studies that has built up and not been used for ten years! From multiple sources I was awarded near £15,000. I am now weeks away from recruiting patients into this study.

If you are thinking of the SSY in research, please do it. My top tips would be, firstly, start early! Research is a slow beast and getting approval for studies in patients without capacity takes time. I met with my supervisor about four months before I started the SSY to get the ball rolling. Second top tip - network! Just from announcing my idea I actually had two professors with two teams of scientists who came forward for this project.

Finally, a lot can happen at sea with research. Don't worry this will not affect your progress. You won't be penalised if you don't manage to create a study within the time frame, or at all! In fact to pass you only need to have drafted a study protocol. If you decide to join me on this research route, good luck!



Visit the FICMLearning website for some fantastic podcasts, blog posts and cases of the month. Our most recent content includes:

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- Blog: Fire! FIRE!!
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Gloves up, knives down: supporting community boxing projects



Dr Rosie Worrall

ST7 Dual Anaesthetic & ICM Trainee

FICM Deputy Lead StR Representative

If I asked you to think about boxing, you might hum the Rocky montage, or you might envisage the likes of Anthony Joshua and Tyson Fury trying to knock each other out. Ten years ago, when I was first approached about becoming a doctor for the Amateur Boxing Association (England Boxing), I admit I was a little apprehensive.

However, whilst there are occasionally some senior heavyweight bouts (which still make me nervous!), most of the boxers that I am involved with are aged 12-16 years, and spar with head guards. Some of the best amateur boxing I've seen isn't bloody, and it doesn't end in a knockout, but it is a show of technical mastery.

Boxers are matched by age, weight and also generally skill/number of bouts. If they are new to the sport then they might be put into a 'skills match' which is a non-scoring exhibition, designed to get them used to being in the ring and in front of an audience. Boxing at this level is about teaching discipline, respect and building confidence.

Medical input

From a doctoring point of view, boxers require an annual medical, which is recorded in their medical card. There is a list of disqualifying conditions in the Medical Handbook, but most commonly I find that potential boxers fail on poor eyesight. At a boxing show, there has to be an ALS trained doctor with basic medical equipment and skills to manage an airway or BLS until the paramedics arrive (this is worst case

scenario!), but more commonly doctors deal with nosebleeds, cuts, sprains and occasionally shoulder dislocations.

At the weigh in, each boxer is reviewed by the doctor to ensure they are fit to box, and afterwards there is a post-bout assessment to check for any major injuries or to issue advice. During a bout, the doctor sits ringside and might be asked to review a boxer by the referee. They can stop the bout if they are concerned about a boxer's health. If a boxer is injured, this is recorded in their medical card, and if appropriate a period of 'no contact' e.g. after a technical knockout, can be mandated.

Different sporting arenas

Amateur boxing can be a step into professional boxing, which is governed by the British Boxing Board of Control and tends to be made up of a larger medical team, with a more specialist skill set. Equally it can lead into other medical sporting arenas and on two occasions I've also sat ringside at televised Mixed Martial Arts events. Both of these experiences were eye opening into the glamour and showboating that goes into putting on entertainment for thousands of spectators.

Grassroots clubs

Coming back to amateur boxing, I greatly respect what the grassroots clubs do for these young people and the wider community. Many of the clubs that I am involved with take youngsters from deprived areas and support anti-knife, anti-gang projects such as "Gloves up, Knives down". One club in particular I've worked alongside supports females who come from a background of domestic violence.

If these young adults want to box then they have to stay out of trouble at school/work, turn up to training regularly, respect their coaches and learn how to lose a bout gracefully. Some of the children that come are initially withdrawn or shy and the confidence that this sport gives them is remarkable. Some even go on to become Olympic medalists - in Tokyo 2020, both gold and silver medals went to boxers from West Midlands based clubs.

Giving back

Boxing coaches do a huge amount with limited resources and rely on the goodwill of volunteers, of which doctors are in short supply. For me it has been greatly fulfilling to give back to the community in this small way. If this has sparked anybody's interest and you would like more information about how to get involved with your local club then please do get in touch with me!



Safety Incidents in Critical Care

February 2024 | Issue 10

Introduction

Through a data sharing agreement, the Faculty of Intensive Care Medicine can access a record of incidents reported to the National Reporting and Learning System (NRLS). Available information is limited and from a single source, all that we know about these incidents is presented in this report. The safety bulletin aims to highlight incidents that are rare or important, and those where the risk is perhaps something we just accept in our usual practice. It is hoped that the reader will approach these incidents by asking whether they could occur in their own practice or on their unit. If so, is there anything that can be done to reduce the risk?

Case 1 | Needlestick injuries

A nurse was taking a blood sample from a haemofiltration filter. The patient was known to be positive for a bloodborne virus. The needle slipped and penetrated her thumb.

Comment

Sharps injuries seem as old as medicine itself, and many readers of this bulletin will probably have had one. As this case demonstrates, the consequences can be significant both for the individual and the organisation, but we also know that such injuries are still underreported. This must be because they are seen as trivial, or are normalised, and instituting any changes in practice to avoid them may therefore be challenging. The availability and adoption of safety engineered devices has been beneficial, but avoidance of the risk is even better. Are there any tasks on your unit that could be replaced with a sharp free alternative?

Case 2 | A missed prescription

A postoperative patient was prescribed dual antiplatelet therapy without gastrointestinal bleeding prophylaxis whilst in the critical care unit. After discharge to the surgical ward, the patient suffered a major upper gastrointestinal bleed requiring endoscopic intervention.

Comment

This BMJ article describes a quality improvement project designed to encourage PPI prescription in a coronary care unit, and provides a summary of guidance. The reported intervention consisted of visual aids and education, with a plan to alter paper documentation to provide visual prompts. The implementation of electronic prescribing is sometimes only thought of as a way of reducing errors in prescribing, but with decision support it can also be a useful tool to encourage appropriate drug use and adherence to pathways. Cases such as this also highlight the potential for clinical pharmacists to optimise treatment and identify prescribing omissions.

Cases 3 | Inevitable harm?

There have been several reports of anterior pressure damage associated with the prone patient position.

Comment

The narrative of these incidents commonly includes a comment that the pressure damage was unavoidable, or the result of necessary harm for urgent need. This UK observational study, conducted during the COVID pandemic, reported an incidence of anterior pressure damage of 88.7% when patients were in the prone position for >1 day, which does seem to suggest at least a degree of inevitability.

The PROVES study did not report any data on the incidence of pressure damage, however they report in their supplementary appendix that the patient's knees, forehead, chest, and iliac crests were protected using adhesive pads, and that the patient's head was turned every two hours.

In 2019, the FICM and the Intensive Care Society produced joint guidance for prone positioning, which does include some information on reducing the risk of pressure damage. The associated harm from prone positioning remains worthy of further investigation and innovation.

Safety Incidents in Critical Care | February 2024 | 11

The tenth issue of the *Safety Incidents in Critical Care Bulletin* is now available. The Safety Bulletin covers safety-related issues in critical care and specific topics.

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Thursday 10 October 2024

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If you would like to contribute to future issues, please get in touch at contact@ficm.ac.uk.



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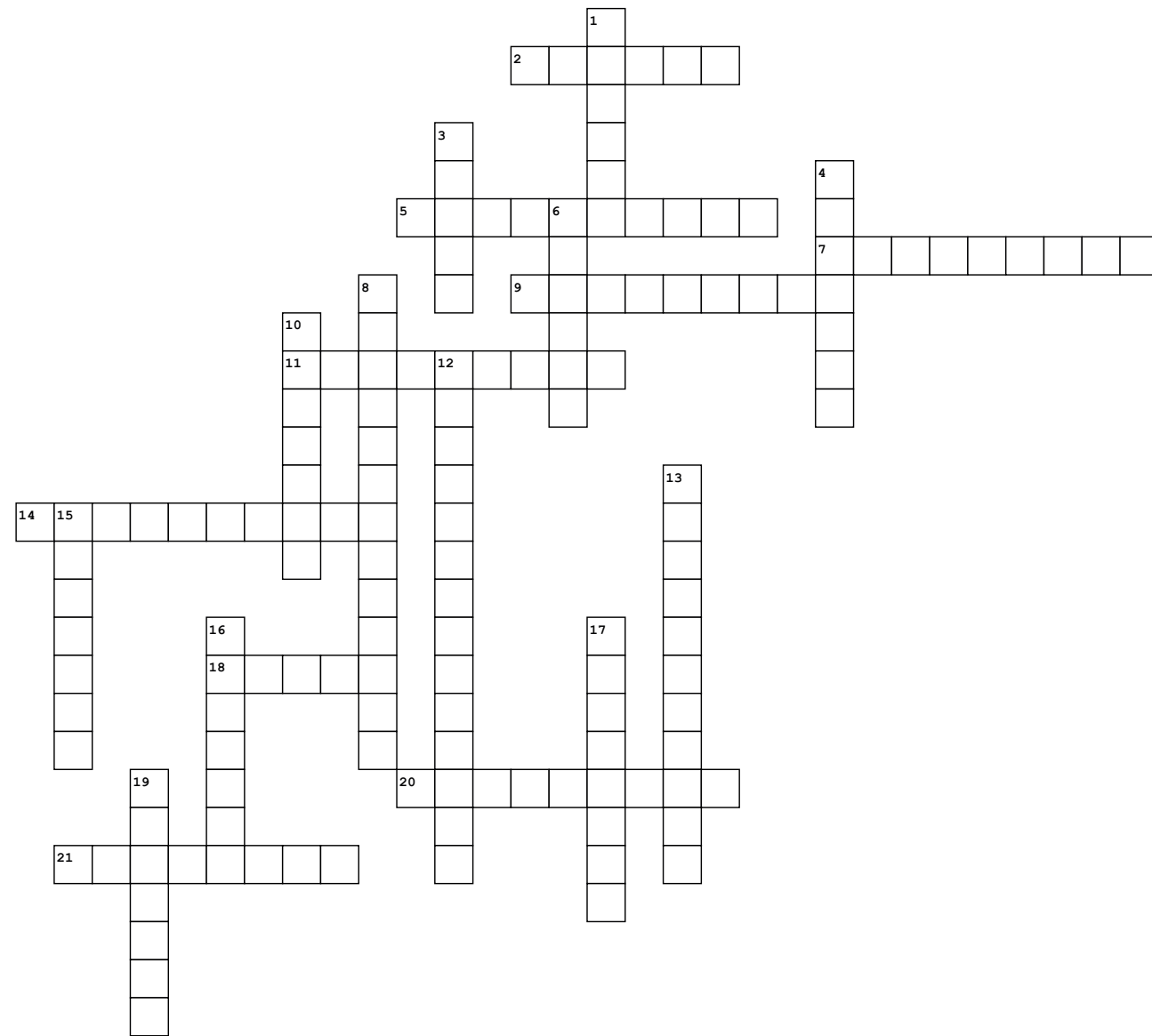
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FFICM EXAMINATION CALENDAR

FFICM FINAL MCQ	
Exam applications open	11 March 2024
Exam applications close	25 April 2024
EXAM DATE	27 June 2024
Fee	£560
Results	16 July 2024

FFICM FINAL OCSE/SOE	
Exam applications open	24 June 2024
Exam applications close	5 August 2024
EXAM DATE	30 Sept - 3 Oct 2024
Fee	Both TBC OSCE TBC SOE TBC
Results	22 October 2024

ACCU Gastroenterology Crossword



Across

- 2. Genotype in IBD, Ankylosing Spondylitis, etc
- 5. Balloon tamponade of bleeding oesophageal varices
- 7. Coarse flapping movement of the hands in encephalopathy
- 9. Point where the appendix is located
- 11. Resection of the rectum and sigmoid colon/type of fluid

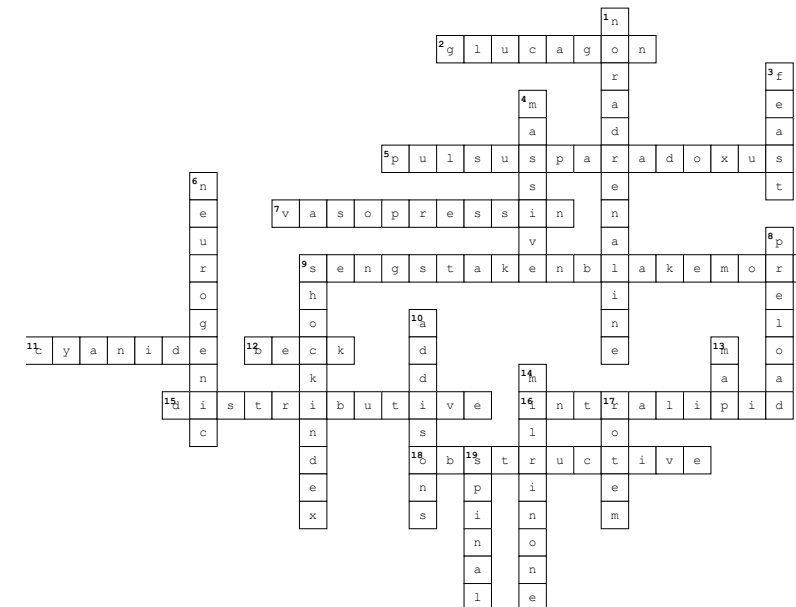
Down

- 1. Ingestion of two or more of this type of foreign body necessitates urgent surgical removal
- 3. Pancreatic enzyme replacement therapy
- 4. Score of consciousness, pancreatitis, bleeding and outcome
- 6. Part of the duodenum where the biliary and pancreatic ducts enter
- 8. Most common site for a small bowel obstruction (8,5)

- 14. Abdominal tumour presenting with abdominal pain and recurrent peptic ulcer disease
- 18. Syndrome of colonic angiodysplasia associated with aortic stenosis
- 20. Abnormal vascular lesion of the stomach
- 21. Oesophageal metaplasia secondary to reflux

- 10. Pain, fever and jaundice
- 12. Preferred antiemetic in autonomic neuropathy
- 13. Antibiotic in bleeding varices
- 15. Blood test used to diagnose hepatic encephalopathy
- 16. Pancreaticoduodenectomy
- 17. Hormonal treatment for oesophageal foreign bodies
- 19. Common bile duct obstruction secondary to a cystic duct stone

ACCU Shock Crossword: Answers



Across

- 2. Inotrope in beta blocker poisoning, increasing cAMP without the beta receptor
- 5. Systolic BP variation on respiration occurring in tamponade
- 7. Second line vasopressor to be avoided in known GI ischaemia
- 9. Tube used in management of acute variceal haemorrhage
- 11. Causes shock through inhibition of the electron transport chain with hyperlactataemia
- 12. Triad of shock, raised JVP and muffled heart sounds in tamponade
- 15. Class of shock, i.e. anaphylactic, septic, neurogenic
- 16. Antidote for haemodynamic collapse secondary to local anaesthetic toxicity
- 18. Class of shock, i.e. tamponade, tension pneumothorax, massive PE

Down

- 1. First line vasopressor in shock
- 3. African trial suggesting harm from large volume fluid resuscitation
- 4. A PE with haemodynamic compromise
- 6. Hypotension and bradycardia due to loss of sympathetic outflow.
- 8. Element of stroke volume affected by fluid resuscitation
- 9. Heart Rate/Systolic BP
- 10. Shock with hyperkalaemic hyponatraemic metabolic acidosis
- 13. Systolic BP + (2 x Diastolic BP)/3
- 14. Renally excreted inodilator with a long half life
- 17. Haemostatic test used to guide blood product resuscitation in haemorrhage
- 19. Form of shock that is not true shock. Presents with flaccid areflexia.



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Churchill House | 35 Red Lion Square | London WC1R 4SG
tel 020 7092 1688 | email contact@ficm.ac.uk