



ABOUT SURGO

SURGO MARRIES THOUGHT-
PROVOKING ARTICLES AND
INTERVIEWS WITH ANECDOTES THAT
STUDENTS ACROSS THE MEDICAL
SCHOOL CAN RELATE TO.

THE NEWSPAPER FOR GLASGOW MEDICAL STUDENTS

ESTABLISHED IN 1925

WE MAY HAVE PUBLISHED OUR FIRST
ISSUE IN 1925 BUT WE HAVE NOW
ENTERED THE DIGITAL AGE OF SURGO
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THE NEXT CHAPTER OF SURGO



MEET THE NEW EDITOR-IN-CHIEF

I am delighted to have been voted Surgo's Editor-in-Chief for 2025/26 at MedChir's Annual General Meeting! I am excited to continue the legacy that Danyaal has left us, continuing to inform, educate and entertain members of the medical school and beyond.

Expect interesting stories, student experiences and events to feature in Surgo, with more reader engagement through interactive competitions and collaboration with clubs and societies.

Look forward to big things over the coming year, not least our fresh new format, but new regular features and quizzes to keep you on top of all things Glasgow medicine.

This edition, read about a pioneering public health academic, who transformed the management of upper GI bleeds, student electives, humanitarian missions overseas and exciting new societies which are having a positive impact on improved accessibility to medical school; to name a few!

Alongside an excellent committee, I want to make Surgo the cornerstone of our shared medical school experience and a source of support to help people get through the throes that come with it!

Innes Crawford
Surgo Editor-in-Chief 2025-2026

MEET THE NEW PRESIDENT OF MEDCHIR

Freshers – Welcome to Glasgow, welcome to Medical School and a warm welcome to MedChir!

“Getting into medical school is the hardest part, after that it’s so chill” is unfortunately the biggest lie in history! It’s a challenging degree but it’ll empower you and give you the greatest appreciation for this career & your impact on others. It’ll be the best and worst moments of your life so far, where you’ll meet your best friends, your future partners, and the greater medical community that you’ll be a part of for the rest of your life.

There’s a famous reputation about medical students, that we work hard and party the hardest – that’s where MedChir comes in, to support every cram and every pint. Founded in 1802, we’re one of the oldest societies in Scotland – hosting esteemed educational events alongside equally esteemed – hopefully – social events on Thursdays, famously with free pints! (For my fellow beer haters, free pints of cider too don’t worry!). MedChir will fill your social calendar with our famous traditions and events where general Uni life can’t.

We’re starting the year strong with our Freshers’ event – where we’ll host our elections for First Year Reps – which myself & Innes both were! Free pints, new friends, good times, and after at HIVE! Later, we have the Freshers’ Ceilidh! If you’re not Scottish, I assure you come and experience the culture, it’s a good time!

Medic Families, one of the biggest and busiest nights in the Union, is a must-do. We’ll sort you with parents and grandparents after you fill a wee form, and you’ll get some gentle-parenting - or not. You’ll get your bibs n’ binkies and meet people in the years above who can become great mentors and friends!

Semester one concludes with our fast selling-out Annual MedChir Ball, as well as SNIMS (Scottish & Northern Irish Medical Students Sports Tournament), which is basically a B-Rate Goblet of Fire. Fifteen hundred medical students gather in a city – this year Dundee – for two night-outs and a sports tournament (my personal favourite event). You need to be on a medic sports team to join so get browsing at which medic sport society is for you!



A final note, please make the most of first year! In two or twenty years we want you to look back and have the fondest memories of good times and antics with friends where possible. And if the constant mention of parties is dissuading any of our fellow non-drinking freshers, I want to assure you we facilitate alcohol-free fun and disapprove of peer pressure or judgement at every event from Freshers to the Ball.

We can’t wait to meet you!
Welcome to Glasgow, Fàilte gu Glaschu and ڳلاسگو میں آگئے ہیں مبارک!

Rohaid Riaz
President of MedChir 2025-2026

WHAT'S ON THIS SEMESTER?



By Innes Crawford

The Medico-Chirurgical Society (MedChir) host a range of social and educational events throughout the year on a Thursday night which are attended by students across all year groups.

Kicking off the year is the Welcome Event; a relaxed evening the Glasgow University Union where you can meet classmates and get to know what the society is all about. A fortnight later, dust off those dancing shoes and show off those impeccable dance moves at their annual ceilidh. Want to meet new friends for life? The Medic Families event is a firm favourite, with hundreds of first years gaining Medic siblings and parents, who coach you through the first of medical school and beyond. Scottish and Northern Ireland Medical Students sports (SNIMS) is a fun two-night trip away to Dundee to play sports and explore the sights that Tayside has to offer! Finally, the MedChir ball at the end of November, is the perfect way to dress up and let off some steam before the Christmas exam fun.

📅 18th of September – Welcome Event

📅 2nd of October – Ceilidh

📅 9th of October – Medic Families

📅 23rd of October – SNIMS Warm Up

📅 28th of November – MedChir Ball

WHICH SPORTS CLUBS SHOULD I JOIN?



Glasgow Medics Badminton
@gumedicsbadminton



MedChir Hockey
@glasgowmedchirhc



Medchir RFC/Medchir Women's RFC
@medchirrfc/medchirwomensrfc



MedChir Basketball
@medchir.basketball



Glasgow Medics AFC/ Women's Football
@glasgowmedicsafc/milfymedicsfc



GU Medics Frisbee
@gumedicsfrisbee



Medchir Dodgeball
@medchirdodgeball



MedChir Running
@medchirrunning.gla

🔍 DID WE MISS ONE?

If you would like your society/club to feature in the next edition, email us at surgo_uofg@yahoo.com

SURGO MEETS DR OLIVER BLATCHFORD



In June, Professor Cindy Chew met with Dr Oliver Blatchford of the Glasgow-Blatchford Score (GBS).

By Professor Cindy Chew

This issue, we speak to Dr Oliver Blatchford of the Glasgow-Blatchford Score (GBS). Published in the Lancet (2000), the Glasgow-Blatchford score has had a significant impact on the management of patients with upper GI bleeding by improving risk stratification, guiding patient care, and optimising resource allocation.

1) Dr Blatchford, since it is graduation season when we meet, please tell us a little of your career after you qualified MBChB and why you chose the specialty you did.

I had great fun during my career from a variety of different roles, responding to different challenges. From Obstetrics to General Practice to Public Health to Health Protection Scotland – from dealing with CJD to Legionella to TB and COVID. There's always something new to be done, and it's always FUN!

I like interacting with people and coming up with the best patient-centred care together with the people being treated. Obstetrics allowed that and it's about new life and caring for healthy people. Then I was diagnosed with melanoma by Professor Rona Mackie – that changes one's perspective! So I moved into GP in Possilpark – where I thoroughly enjoyed figuring out every day "What can I do to help my patients?". Gradually it felt that my work became more about money than people, so I left my partnership without a back up job to turn to. I was very lucky to end up in a Research fellow post with the Royal College of Physicians and Surgeons in Glasgow.

That six months' post extended to two years – leading to the GBS and an MD (after having already got my PhD

investigating the cause of variation in emergency admissions and a Masters in Public Health). I am currently studying with the Open University for a degree in Mathematics...but that's another story!

2) Can you share some of your career highlights?

I am not going to bore you with what I did – the important message is: IT WAS FUN!

Despite having never looked down an endoscope, the GBS is of course one of my career highlights. It has made a difference, saving NHS resources by using evidence to predict safely which patients with upper GI bleeds are low risk and do not need admitting to hospital. It is the first one to actually work! Even today people write to me from all around the world to try and make a "GBS Mark II", a better prediction tool, it hasn't quite come to pass. Maybe one day, someone will come up with the maths to predict this better.

While the GBS gives me quiet personal satisfaction in having made a difference in patient care. It is nonetheless fun to see the change in medical students' or gastroenterologists' faces when they finally twig who I am.

3) Tell us a little of your time as a student at Glasgow University, especially about your time in MedChir?

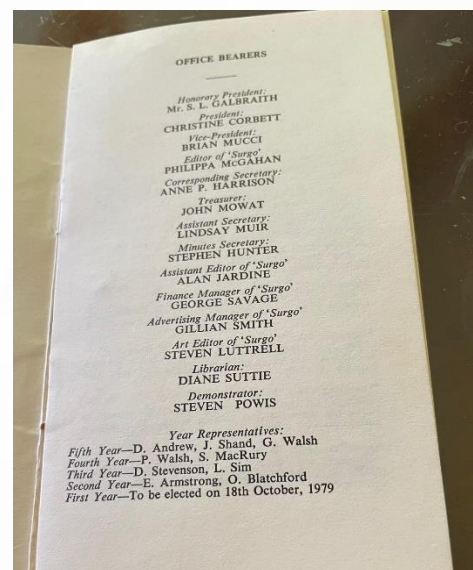
I came to Glasgow as a transfer student from South Africa. I was encouraged to sign up as the Year Rep in first year and was a year rep every year after that until Final Year when I was Treasurer of MedChir. I met lots of people and socialised in the many bars and pubs along Byres Road. I learnt to wind surf at Lochwinnoch when I was a student – we only stopped when our baby arrived. I walked a lot – till this day I belong to a walking club where I walk at least 10 -15km once a week.

4) What would you say to your medical student self if you had the chance?

"Keep on going. It is always going to be fine! If things feel like it's going wrong, something WILL work out. Be positive! Be a glass half full person. Believe in yourself!"

5) What would you say to medical students today?

Go for it! Follow your nose. Don't be afraid to try something new. Always be curious, flexible, adaptable and willing to change. Life and what's "true" today may not be so tomorrow. We were told unambiguously "The treatment of this condition is THIS" and it was wrong! Stay inquisitive, always question. Don't be afraid to go out of your comfort zone. Blatchford Score was a hunch – I had to do better, learn different skills to make it work. It is important to learn how to learn in medical school than just cram in knowledge.



MedChir Office Bearers for the 1979/80 academic year.

The Glasgow-Blatchford Score stratifies upper GI bleeding patients who are 'low risk' and candidates for outpatient management. A score of >0 indicates medical intervention is likely required¹.

Admission risk marker	Score component value
Blood urea (mmol/L)	
6.5–8.0	2
8.0–10.0	3
10.0–25	4
> 25	6
Haemoglobin (g/dL) for men	
12.0–12.9	1
10.0–11.9	3
< 10.0	6
Haemoglobin (g/dL) for women	
10.0–11.9	1
< 10.0	6
Systolic blood pressure (mm Hg)	
100–109	1
90–99	2
< 90	3
Other markers	
Pulse ≥ 100/min	1
Melaena	1
Syncope	2
Hepatic disease	2
Cardiac failure	2

Reference:

1. Blatchford O et al. A risk score to predict need for treatment for upper gastrointestinal haemorrhage. Lancet, 2000, v356 (9238):1318–21.

GLASGOW STRAIGHT TALK UGANDA TRIP



The Glasgow Straight Talk Team consisted of Emma Millar, Isla Horsburgh, Katie Foreman, Ruby McGill, Eve Weinberg, Natasha Nevins, Himani Kumar, Katie Smith.

By Himani Kumar

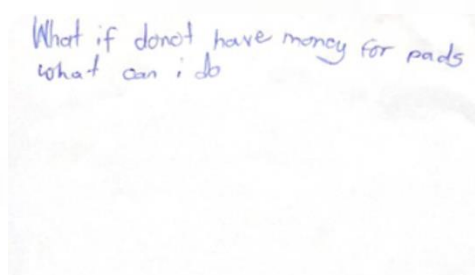
This summer, the Glasgow Straight Talk Society sent a group of eight second year medical students for a five-week outreach project in the Eastern Districts of Uganda. There, we educated young people about sexual and reproductive health and rights. We started fundraising in September of 2024, organising events such as bake sales, pub quizzes and mock exams. Later on, we were also granted the University of Glasgow's Chancellor's Fund, to help us with our project. Then on the 13th of June 2025, we set off!

After orientation in Kampala, we set off to the first district, Bugiri. To teach, we started off by performing a skit to the whole school, often outside, under trees, to the children and young adults, who were often in their thousands. After our skit, we broke into classes and started our face-to-face sessions. In these classes, we went over general topics in more depth and then gave the students opportunities to ask their own questions. This was by either putting their hand up or writing it down on paper we gave them. We also did condom demonstrations and used visual aids (like female reproductive tract diagrams) to convey our message, as we were very aware of the language barrier.

After completing our second district, Iganga, we estimated we spoke to 12,386 students, although this is probably a lot more! We collected all the written questions we received, which gave us insight on what topics were most asked about. Menstruation made up the overwhelming majority of questions asked (23%), some were basic questions about physiology and their personal menstrual cycle variation, whilst many were on period poverty. We know that period poverty was the most pressing problem young women faced. Many



The Glasgow Straight Talk Team in action at Hindocha Primary School, Bugiri District.



An example of one of the many written notes the group received, highlighting the period poverty students faced.

missed school for the entirety of their period or simply dropped out after their period began.

Overall, the trip was incredibly rewarding. The Straight Talk Foundation do incredible work for young people in Uganda, equipping them with the knowledge to lead healthier and more empowered lives. Despite some of the students coming from very difficult environments, they were incredibly resilient and inspiring. I know the entire team return home with a fresh perspective and sense of gratitude for the privileges we have.

We hope that, in reading this article, we can inspire a new team of second years to consider joining Straight Talk and and hopefully return to Uganda in coming years! We would also like to use this opportunity to thank the Straight Talk Foundation, The University of Glasgow, the schools and teachers and most importantly, the students.



GOT A STORY TO TELL?

Surgo are actively looking for contributors to feature in the next issue.

Benefits of writing for Surgo include an official publication with an associated DOI number which can be referenced in your CV, prizes at stake for the best submissions and your literary talent featuring on Glasgow Open Journals, an online platform that allows readers from around the world to view your work!

From your elective in Hillhead to Hawaii, Surgo wants to hear what you get up to.

Interested? Email surgo_uofg@yahoo.com with your article idea or visual abstract and the team will be in touch.

Don't delay, submit your article today.

WHY LANGUAGE MATTERS IN MEDICINE



Université Catholique de Lille hosted the Medical French Weekend.

By Shaha Alajeel

Language barriers are widely recognised as a major determinant of health equity. Such barriers in healthcare hinder effective communication between patients and clinicians, compromising patient safety through increased rates of adverse outcomes, diagnostic errors, and medication inaccuracies. They also diminish patient and healthcare professional satisfaction, reduce overall quality of care, and indirectly lead to prolonged consultation times along with increased healthcare costs.¹

French is the fifth most spoken language globally, with 321 million speakers across Europe, Africa, North America, and Asia. It serves as an official language in 29 countries.² For medical students, proficiency in French constitutes both a cultural asset and a practical means of lowering language barriers among diverse patient populations.

The Anglo-French Medical Society (AFMS) organised an annual Medical French Weekend Residential Course in Lille. This program provided students with the opportunity to approach language as a clinical tool rather than purely academic pursuit.

The AFMS was established to foster collaboration and partnership between British and French healthcare professionals. Its annual Lille course is one of its leading student initiatives, intended to equip attendees with the history-taking skills, clinical vocabulary, and the opportunity to apply those skills in French. The programme merged specialty-based teaching, stimulated scenarios, and practical workshops. The sessions comprised of multiple disciplines, including emergency medicine, psychiatry, respiratory medicine, obstetrics and gynaecology, and cardiology along with a focus on humanitarian practice with tutors sharing their experiences of practising in Francophone healthcare systems. Above all, the course welcomed

students of all levels, from beginners with a basic knowledge of the French language to near-fluent speakers focused on refining their clinical terminology.

This inclusion embodies the ethos of organiser, Dr Zara Bieler, a clinician practising in both the UK and France. She stressed that language is not peripheral but central to medicine:

“History-taking is the key part of the whole consultation. Even if you only speak a little of someone’s first language, it’s a very human part of the interaction and can go a long way.”

This perspective highlights the integral role of language in clinical encounters. In the absence of a shared language, clinicians may fail to acknowledge necessary details during the history-taking process.

Additionally, Dr. Bieler emphasised the global relevance of French for medical students and healthcare professionals pursuing international work or humanitarian medicine:

“There are large parts of the world where French is one of the main languages. For someone wanting to work with Médecins Sans Frontières or abroad, it can open many doors.”

French is one of the two official working languages of Médecins Sans Frontières (MSF). For those preparing for humanitarian vocations, command of French is not only advantageous but often imperative.

Lastly, Dr. Bieler illustrated the clinical consequences of language skills with a case from her own training:

“A patient of mine developed pre-eclampsia, and I was able to pick it up quickly. I was able to get her into hospital, that baby was born safely. I really think about her and having had that language skill, and that continuity of care really made a difference in that case.”

Dr. Bieler reflection on a case early in her training involving care for a Congolese refugee in the United Kingdom demonstrates that communication in a patient’s primary language can have a direct, significant influence on clinical outcomes.” This emphasis on cultural as well as linguistic understanding was echoed by Dr Margaret Cant, a practising physician in France after many years as a GP in the UK, who tutors on the course in respiratory medicine. She underscored that the significance of language learning goes beyond vocabulary.

“Apart from the obvious advantages of speaking the same language as the patient, learning a foreign language creates an awareness and sensitivity to cultural differences which might, if not recognised, create



Teaching was delivered in small groups, with a focus on practical medical French.

difficulties in the doctor-patient consultation.”

Dr Cant exemplifies this notion with the phrase “la crise de foie”, which is directly translated to “liver crisis”, but in French it’s commonly used to describe digestive upset. If taken literally, it could mislead a non-native speaker. When understood culturally, it illustrates the different ways illness can be expressed and conceptualised.

“Learning a foreign language helps you, as a doctor, to ‘tune in’ to the different ways in which the health of the body is understood by people not brought up with standard British ideas. And this sensitivity is a transferable quality, causing you to question the assumptions you make about the ideas and understanding of the patient in every doctor-patient consultation, whatever language is spoken by the patient.”

Such perspective enhances clinical practice. By questioning assumptions and adjusting to and comprehending various explanatory models of illness, doctors can communicate more effectively with patients from diverse backgrounds. As Dr Cant concluded:

“It enriches your experience as a doctor as well as enabling the patient to feel understood - a sentiment that is highly valued by patients but not necessarily recognised as such by doctors.

From my own standpoint, the weekend I spent in Lille taught me that learning a new language in medicine does not demand fluency to be clinically valuable. Even partial proficiency, such as asking about allergies, explaining a diagnosis, or simply greeting in a patient’s native language, can build trust and rapport and reduce miscommunication.

This lesson was particularly evocative. Arabic, my first language, has refined my outlook of how central communication is in medicine, even prior to significant clinical exposure. French, as another global language, offers a complementary dimension. It diversifies and expands the scope of patients I might one day connect with. Therefore, developing competency in both languages offers a pragmatic



The Lille Medical French Course welcomed over fifty delegates for an immersive weekend of language and clinical learning.

approach to breaking down those linguistic and communication barriers and preparing to practice in global healthcare settings.

The AFMS Medical French weekend ultimately depicts the fundamental principle that language should be seen as a clinical skill rather than merely an optional adjunct. Apart from enhancing vocabulary, initiatives like this foster cultural competence and promote clinician-patient language concordance, outcomes that have been associated with improved patient safety, increased satisfaction, and consolidating trust and rapport between clinician and patients.

With the ongoing globalization and diversification of healthcare, learning new languages offers medical students an effective approach to address health inequalities. Whether serving diverse communities in the NHS or working abroad with organisations such as Médecins Sans Frontières, the means to communicate with patients in their own language is crucial to providing equitable care.

References:

1. Al Shamsi H et al. Implications of language barriers for healthcare: a systematic review. *Oman medical journal*, 2020, v35(2):e122.
2. Ministry for Europe and Foreign Affairs. The French language in figures. Ministry for Europe and Foreign Affairs, 2025.

ENHANCING EQUITY IN MEDICAL EDUCATION

By Sophie Hay and Amelia Cully

Widening access to medical education is a key priority for medical schools. Historically, there has been a stereotype of who becomes a medical student, which is no longer aligned with society today. Only four percent of doctors come from a working-class background¹ — a striking statistic which is often overlooked at a national level. It is crucial that doctors represent the population, to strengthen the doctor-patient relationship and ultimately improve health outcomes.

The challenge of pursuing a medical career often starts in schools. Many from non-selective state schools face barriers when applying to medical school. There is often a lack of awareness of the application deadlines and selection process, which can lead to initial difficulties in applying. It is encouraging to see widening participation initiatives, such as the Reach programme, being implemented to overcome these barriers.

However, the need for support doesn't stop after admission. Medical students from widening participation backgrounds continue to face challenges throughout their time at medical school and beyond. Recognising these challenges is vital to understanding students' experiences. Medical students from widening participation backgrounds are more likely to face mental health challenges².

Imposter syndrome can make it difficult to establish a sense of belonging. Many may not be able to relate to their peers, which can perpetuate feelings of loneliness and isolation. A recent study has shown that a medical student's background is associated with their specialty choice³, highlighting the lasting impact of background on career pathways.

Understanding these ongoing challenges has driven national research initiatives. The National Medical Schools Widening Participation Forum conference in Glasgow provided a valuable opportunity to learn about the ongoing research in this area and connect with likeminded individuals committed to enhancing equity in medical education.

Glasgow University Widening Access to Medicine Student Society aims to provide support for widening participation students across the medical school. Our key aims are to foster community, reduce isolation and help students connect with peers from similar backgrounds. We aim to support medical students across all years by providing education, career networking events and mentorship opportunities.

Exemplary work across the UK has sought to understand the barriers to medical education. However, with so few doctors

from a working-class background¹, there is a long way to go until equity is achieved. Key priorities moving forward include defining widening participation parameters and targeting support at the most under-represented groups. Further research into the challenges faced by widening participation students is needed to improve retention and support. Overall, doctors will truly represent society when opportunity is no longer limited by background.

References:

1. White C. *Just 4% of UK doctors come from working class backgrounds*. *BMJ*. 2016;355:i6330.
2. Ravulapalli KC, Arroyave Caicedo NM, Zahra D, Mirza M. *Quantitative Analysis of Challenges Encountered by UK Widening Participation Medical Students in Comparison With Their Non-Widening Participation Peers*. *J Med Educ Curric Dev*. 2024;11:23821205241249012.
3. Ashley L, McDonald I. *When the Penny Drops: Understanding how social class influences speciality careers in the UK medical profession*. *Soc Sci Med*. 2024;348:116747.



INTERESTED IN WAMSS?



"We are a student-led society aiming to create a sense of community for medical students from widening participation backgrounds. We run a range of educational events such as regular teaching sessions, mock exams and career/networking events. We also run a mentorship scheme to support new medical students with the transition to medical school."

Co-presidents: Amelia Cully and Charlotte Warren-French
Treasurer: Caroline Adesuyi
Secretary: Suen Yee Walker
Welfare Officer: Katie Collins
Instagram: @guwideningaccess

MEDICAL UNCERTAINTY GUIDED BY THE ARTS



Artwork produced by Sophie as part of her elective.

By Sophie Tierney

The high level of assuredness expected of doctors in making life-altering decisions for their patients is juxtaposed with the inherent uncertainty in medicine. Medics must learn to navigate this uncertainty when faced with the everyday trials of balancing resource limitations, diagnostic uncertainty, ethical and social complexity, and multi-morbidity.

When confronting uncertainty in medicine, even at the rudimentary stage of a medical student, there is implicit understanding that we are opening ourselves up to the increased risk of making errors that could have lasting impact on our patients.

With this in mind, I was intrigued, and somewhat sceptical, when presented with the opportunity to undertake an elective in medical humanities, exploring how clinical uncertainty can be managed through the arts and wider humanities. Throughout the four-week elective, there was exposure to an array of disciplines including theatre, music, photography, ethics, and politics.

Among the many experts sharing knowledge of their respective fields was Professor Strazzacappa, who facilitated a week-long workshop of Medical Education Empowered by Theatre (MEET), which serves as a compulsory component of the medical curriculum at the University of Campinas in São Paulo, Brazil¹.

The concept of MEET is founded on Boal's Theatre of the Oppressed and Freire's Critical Pedagogy¹. These ideologies have been amalgamated to foster a learning environment of mutual respect that allows medical students to reflect upon, action change and resolve complex social scenes, often rooted in uncertainty, within the safe space of theatre¹. Planning such scenes and improvising the performance in front of an audience, with no previous drama background, was both challenging and oftentimes uncomfortable. Feeling exposed, and subject to the analysis of

others while performing incited vulnerability, not dissimilar to that experienced by patients who are also submitted to watchful observation in unfamiliar environments.

Aside from allowing us to better empathise with our patients, the self-directed nature of theatre improvisation required ongoing reflection and cognisance of how performance and communication can be attuned to meet the demands of complex, evolving situations and dialogue¹. By employing the theatre-instilled practices of improvisation, awareness of stage presence and continuous self-assessment, we found ourselves more equipped to react and adapt to the fast-paced unpredictability of clinical practice, and action a collective approach to managing medical uncertainty¹.

The elective was also useful in identifying a widespread variance in the interpretations of art amongst a group of medics. This disparity in opinions prompted healthy debate, receptivity to others' perspectives and ultimately, reluctant recognition that art's subjective nature means no one individual's interpretation can be 'correct,' but rather shaped by our own individual experiences. Embracing this subjectivity allowed us to acknowledge that medical complexity cannot always be met with linear strategy or a definitive solution, and that accepting this is a step towards resolution in itself.

Art harbours hidden depth in that it relays meaning beyond words. As such, it can prove challenging to interpret what message the artist intends to convey. Navigating this uncertainty draws upon lateral thinking, introspection and consideration of how individual elements come together to evoke a response from the observer. The application of this reflective process to medical contexts aids in the holistic interpretation of a patient's overall clinical picture where the initial presentation is multi-faceted, and the diagnosis is unclear.

While the underpinning of medicine follows an objective, evidence-based approach, the fundamental "human" core is where its innate subjectivity lies. Both patients and doctors are real people, whose unique experiences shape their perceptions, interactions, decisions and expectations of clinical care. These positions do not always align, and as such, an appreciation of the arts allows us to work alongside this subjectivity, rather than focus on the variables we cannot control. While the arts cannot eliminate the inherent uncertainty in medicine, nor diminish the cruciality that sound



textbook knowledge and clinical competence hold, insight into their subjectivity and an awareness of the parallels within medicine allows for acceptance and reconciliation of the everyday variables and uncertainty doctors must negotiate.

Overall, the elective showcased that the dichotomy between art and science is bridged in medicine. When the lessons of each are applied to clinical contexts, the pair form a mutualistic relationship in which the subjectivity of the arts coupled with the objectivity of science serve as a medical gateway to balanced decision making, well-informed professional reflection and therapeutic patient interactions.

Widespread integration of arts-based learning within existing medical curricula could take form by means of similar modalities to MEET, exploration of anatomy and clinical presentations through illustrative work, or reflecting on medical encounters via creative outlets such as writing or drawing. Widening the modalities through which medical education is delivered could augment critical thinking and affirm a sense of professional identity among students, ultimately facilitating a rise in doctors armoured with the framework to capably navigate a future career of uncertainty in medicine. No AI was used in writing this article.

Reference:

1. de Carvalho Filho MA, Ledubino A, Frutuoso L, da Silva Wanderlei J, Jaarsma D, Helmich E, Strazzacappa M. Medical Education Empowered by Theater (MEET). *Acad Med*. 2020 Aug;95(8):1191-1200. doi: 10.1097/ACM.0000000000003271. PMID: 32134785.

LANDSCAPES, LANGUAGES AND LESSONS: REFLECTIONS FROM THE SUMMER OF 2025



Denver was one of two hundred students from around the world that took part in the Summer school.

By Denver Correia

While setting out the agenda for a new year, making the most of the summer holidays has always been one of my key priorities. The definition of seasons in Glasgow is often imprecise; however, the summer of 2025 has presented a notable departure from previous years. A combination of intermittent rainfall and periods of sustained sunshine had given Glasgow the weather reminiscent of a continental European summer; and at the time of publication, the MET Office even projected 2025 to be the warmest year on record.

Family tradition reminded me that summer has always been a time for experimenting, trying new things, pursuing side quests and most importantly, reflecting on past adventures to make the next one better. This year, I wanted a combination of experiences which could both provide opportunities for rest and renewal, while also positively contributing towards my professional development.

I knew I had to act quickly if I wanted to make the best of it, and the summer of 2025 seemed to arrive sooner than expected. The morning after my final MBChB2 exam, I set off to join the Glasgow University Catholic Society's week-long pilgrimage across Poland. Starting off in Krakow and then to Czestochowa, we visited countless churches while also weaving through museums, markets and sampling some authentic Polish cuisine.

Poland offered numerous highlights, but celebrating my friend Daniel Hirshorn's birthday at the terrace of the Sanctuary of St. John Paul II, and biking through the quiet streets of Czestochowa at midnight were certainly a few of the best memories. Apart from being one of the first pilgrimages I could participate in, visiting Poland proved to be not only a source of spiritual renewal but also a meaningful cultural experience —

one that set the tone for the rest of my summer. An aspect I could reflect on was the benefit pilgrimages could offer both for the health of mind and body.



For my next adventure, I turned East, making a spontaneous three-day stopover in Abu Dhabi, United Arab Emirates before arriving in Chengdu, China. The fragile nature of global travel quickly became apparent, as my onward journey was disrupted by the Iran-US-Israel strikes taking place at the time. Nevertheless, thanks to the University of Glasgow's GoAbroad Fund, along with an all-inclusive waiver from the University of Electronic Science and Technology (UESTC) in Chengdu, I was lucky to join their three-week Chinese Language and Culture Summer School.

Our days followed a full rhythm: 09:00 – lectures on the Chinese phonetic system (pinyin) 13:00 – lunch in one of the eleven vast UESTC canteens 15:00 – cultural excursions to museums, heritage sites, or blended activity classes 19:00 – dinners featuring a variety of local delicacies and Sichuan specialities 22:00 – games night (and pre-drinks) at one of our hotel rooms 02:00 – bedtime (or 04:00 on the nights we went clubbing).

On the weekends, we took trips to neighbouring cities such as Chongqing – a city that felt like a vast maze of skyscrapers rising from steep hillsides, neon bridges stretching across wide rivers, and monorails that disappear into the sides of buildings.

Immersing myself in Chinese culture alongside students from universities across the globe made this summer school one of the most memorable experiences of my holiday. What truly defined it, however, were the people I met along the way — many from countries I might never otherwise have had the chance to engage with. From Australia to Russia, each new friendship taught me that the key to meaningful connections lies not in dwelling on differences, but in celebrating shared experiences and finding common ground. It was a mindset that enriched every part of this trip.



Language barriers aside, visiting China was an incredible experience. From witnessing the country's technological advancements to observing the discipline and work ethic of its people, my admiration for China only grew stronger. It was difficult to categorise the trip: on the one hand, it felt like a holiday, with 4* hotel accommodation, all meals, travel, and excursions fully covered;



yet on the other, it was deeply educational, offering invaluable opportunities to learn about China and its culture. As for the highlights, eating a Sichuan-style frog hotpot and singing a Chinese song for the closing ceremony was a fascinating experience.

Each journey this summer seemed to build upon the last, drawing me deeper into new cultures, traditions, and communities. It felt only natural, then, that my travels would culminate in Italy – the heart of Roman Catholicism – for the Jubilee of Youth 2025, a once-in-a-generation gathering I had long anticipated. Together with one of my best friends, Matthew Donegan, we set out on a hybrid itinerary through Rome, Milan, and Bergamo, carefully balancing the pilgrim spirit of the trip with moments of sightseeing and spontaneous side quests.



Italy offered an experience unlike any other: a seamless blend of pilgrimage and holiday. Our initial focus for the first few days was attending events centred around the Jubilee of Youth, with a key highlight being participating in mass celebrated by the newly elected Pope Leo XIV. We then shifted gears, allowing us to wander more freely through Italy's cities, history, and landscapes – savouring the country's beauty at a gentler pace.

An aspect of this itinerary I was not prepared for was the evening vigil with Pope Leo XIV at Tor Vergata. Surrounded by herds of young Catholics, estimating to roughly 1 million – several aspects of the common belief, hope, and unity we all possessed were on display. Notably, some parts of this experience were truly remarkable – the feeling of being around a million Catholics, prayers offered for people in countries affected by conflicts, and most importantly the opportunity to attend the Benediction of the Blessed Sacrament. The next phase of my Italian adventure took us northwest to Milan and Bergamo, where we immersed ourselves in the cities' rich cultural and historical heritage. From exploring grand cathedrals and bustling piazzas to tracing the quieter rhythms of local life, each stop revealed a different facet of northern Italy. A touch of spontaneity also carried us further afield to Lake Como, where the serene waters and dramatic mountain backdrop provided a sharp contrast to the energy of our cities.

Returning to Glasgow, I knew there was still room to advance the professional development goals I had set before the summer began. Thanks to the generous support of Medical Research Scotland's Undergraduate Vacation Scholarship, I began work on a novel project in

collaboration with the General Practice & Primary Care team at the University of Glasgow's School of Health and Wellbeing. Our research focused on exploring how access to parks – and the quality of those green spaces – can influence mental health outcomes, an area that felt both timely and deeply relevant.



Looking back, the summer of 2025 became far more than a sequence of trips and projects – it was a season of growth, marked by faith, friendship, and discovery. From pilgrimages in Poland and Italy to cultural immersion in China, and finally to research back home in Glasgow, each experience added a new dimension to how I see the world and my place within it. What began as a desire to balance rest, renewal, and professional development evolved into a journey that challenged me, broadened my horizons, and left me eager to carry these lessons into the years ahead.

MY SUMMER AS AN ANATOMY INTERN



By Innes Crawford

This Summer, I had the privilege of working under Siobhan Cantley and Professor Scott Border as a multimedia intern at the Anatomy Department of the University of Glasgow. Having seen the position advertised by the Student Opportunities Hub, I was intrigued by the prospect of self-directed content creation, utilising existing technology and practices to develop new teaching modalities for students at the college of Medical, Veterinary and Life Sciences.



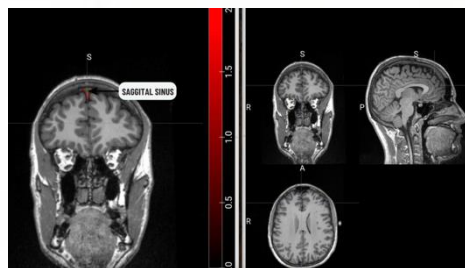
The Clinical Anatomy Skills Centre of the Thomson Building¹.

The Thompson building is home to the Clinical Anatomy Skills Centre of the Royal College of Surgeons of Glasgow, where trainees develop their surgical skills on cadavers under supervision. Separate from the MBChB and Anatomy BSc curricula, the team are keen to integrate training footage from these courses into undergraduate teaching, to give them a perspective of how an understanding of anatomy is utilised in clinical practice. For example, I used footage from an abdominal laparoscopic procedure to visualise the boundaries of the abdominal cavity. Learning how to make mini lectures while complying with the human tissue act was a huge challenge but one so important given the gratitude and respect owed to our body donors.

Three-dimensional visualisation of anatomy is another modality I spent time trying to develop. Through attending training at the University of Edinburgh, I

learned how to use the department's Artec Spider 3D scanner; a highly impressive device that creates high precision 3D models of real-world objects. Prosection teaching is not without its challenges which include long-term sample preservation and accessibility in large cohorts, therefore I discovered the benefit of having digital 3D models of prosections to complement existing in-person teaching.

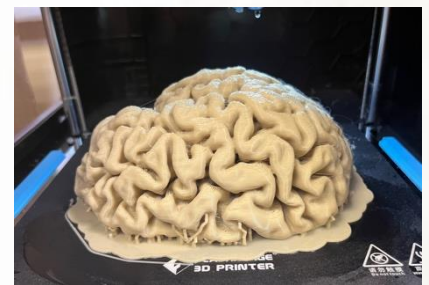
A highly accessible modality that predates the Artec scanner is the MRI scan and as such I gained access to one of my own from a research study I took part in last year. Being able to demonstrate my own neuroanatomy in the mini lecture was quite the privilege and highlights how far we've come from looking at a film on a lightbox.



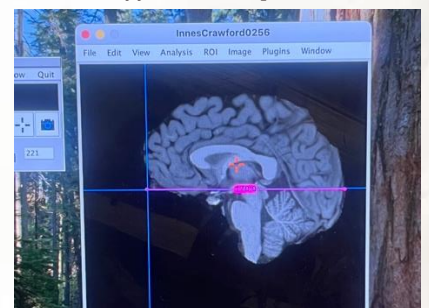
The MRI images allowed for visualisation of neuroanatomy structures in multiple planes.

Making anatomy more tangible is another goal of the department and 3D printing was one of their recent investments towards this. Having converted my MRI scan into a 3D model on Blender, I set about printing a life size model which after a lot of trial and error I managed to complete. The department are not short of anatomy models therefore I was keen to make my prints of educational benefit. Few models of musculoskeletal joints can be physically manipulated and taken apart therefore this is something I hope to develop.

Overall, the use of this innovative technology is likely to improve the anatomy learning experience. A learning point from the internship is the importance of keeping innovation relevant to the outcomes you are trying to achieve. Dopamine addicts like myself are very excited by fancy new



The right cerebral hemisphere took upwards of fifteen hours to print.



The process involved measuring the length of the brain in order to print it to scale.

technologies such as 3D printers, scanners and virtual reality devices such that we often don't consider their impact and efficacy as learning tools. It is therefore essential that if these practices are introduced into the curriculum, they must be supported by robust evidence that supports enhanced learning outcomes and are not merely gimmicks.

This is an exciting research space and one that I would like to contribute to following my internship experience.

Reference:

1. University of Glasgow - Schools - School of Medicine, Dentistry & Nursing - Anatomy Facility [Internet]. Gla.ac.uk. 2022 [cited 2025 Sep 14]. <https://www.gla.ac.uk/schools/medicine/anatomy/>

THE PROFESSOR STUART MCDONALD ANATOMY DRAWING AWARD

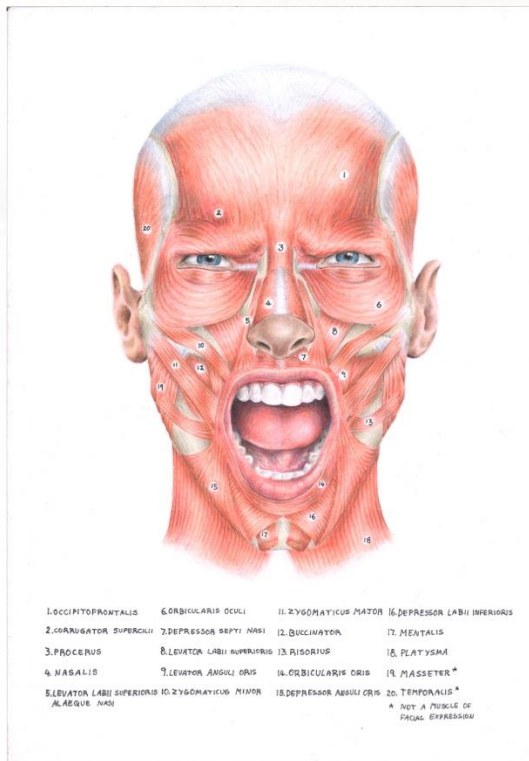
By Nina Kacmarska

Professor Stuart McDonald was professor of Forensic and Clinical Anatomy at the University of Glasgow for over forty years and taught anatomy to numerous medical, dental and science students during his lifetime. To commemorate his invaluable memory, the Head and Neck anatomy drawing award was created. The intricacy and organic art of the human body is admirable to many, if not all students who study anatomy, and this award is a touching reminder of the indispensable relationship between art and science.

The award is open each year for all year two Medical Students, year three Dentistry Students and year three BSc Honours Anatomy Students with the winner being awarded a prize of £200 and a certificate of achievement. The judges' criteria included originality, creativity and anatomical accuracy – which were used when deciding upon a winner.

The winner of this year's award was current Year three Medical Student Elliot McColgan for his original and intricately labelled pencil drawing of the muscles of facial expression. I would also like to congratulate the two joint runners up Zainab Mahmood and Ameerah Gardee as well as highly commended Linda McVey, Ruby McGill and Zaren Nacario. Each student's entry displayed an impressive level of creativity and talent.

I managed to speak to Elliot, who explained that he drew his admission during the lighter final week of the Head Neck and Neuro block, and this allowed him to dedicate more time to his art. As this was the last week of teaching before the Easter break, Elliot commented that the process of creating his drawing was a helpful way to consolidate his understanding of the position and unique function of each muscle associated with facial expression. Drawn in coloured pencil, Elliot said he chose this as his preferred medium as it was the most efficient way to add the layers of detail needed to accurately depict the muscles of facial expression. There is so much content to learn and memorise when studying human anatomy, so it can be helpful to explore a variety of learning techniques. This could include drawings, paintings, mind-maps, flashcards, mnemonics, learning in groups of friends, teaching others or even creating games. Each student will find different methods more effective than others, and it is appreciable that the University of Glasgow actively encourages



Muscles of Facial Expression In Action by Elliot McColgan.

all Anatomy students to incorporate drawing and art into weekly learning. The introduction of the Stuart McDonald Anatomy Drawing award is a genuine celebration of the interconnectedness of art and science.

By Elliot McColgan

For as long as I can remember I have loved art. I think this partly fuelled my interest in medicine as fundamentally, it integrates both scientific and artistic principles. There is not always a formula or 'correct answer'. This is perhaps best seen in holistic healthcare, where evidence-based medicine is balanced with an emphasis on patient individuality, considering their physical, social and psychological needs. This appreciation for the mix between subjectivity and precision has shaped my interest in pursuing a career in plastic surgery and is ultimately why I chose to focus on the muscles of facial expression. It strengthens knowledge that will be essential later on and explores an aspect of human anatomy I find fascinating. Drawing has become an enjoyable and rewarding method of learning that I have incorporated into my revision. It allows me to look at things from a different, more detailed, perspective. This process led me to an ongoing discussion, whether the muscle of facial expression, 'Depressor Supercilii' is a distinct muscle,

contributing to eyebrow depression, or actually part of 'Corrugator Supercilii' or 'Orbicularis Oculi'. Engaging with this broadened my overall appreciation of the anatomy and highlighted that medicine is full of nuance and interpretation. To me, that is where its artistry stands out.



FEELING CREATIVE?

"A picture is worth a thousand words" - Confucius

Introducing the Surgo Vision Competition

To encourage intellectual curiosity, critical thinking, observational and diagnostic skills, the ability to empathize with patients, and promote a general sense of well-being, Surgo will publish up to five images submitted by medical students in each issue. Images can be in the form of a painting, cartoon, photograph, still life drawing, doodle - the list is endless. Limited only by your imagination.

Selection criteria:

1. The image must be an original piece, submitted via email.
2. It should be certified as original and be accompanied by a short description of what it represents/means to you/ why it should be published.
3. The best five will be selected for publication in Surgo by Professor Cindy Chew.
4. Each successful submission will be awarded £20.
5. At the end of the year, all published images are eligible to compete for the Best Medical Vision prize - up to £100.

Interested? Email surgo_uofg@yahoo.com with your image and the team will be in touch.

THE WOLFSON SAYS GOODBYE TO A GLASGOW GREAT



Dr Gilmore carried the Queen's Baton during the Glasgow Commonwealth Games relay in 2014¹.

DR DES GILMORE, LECTURER AND A FRIEND TO MANY SADLY PASSES AWAY

By Innes Crawford

In July, students and staff at the University of Glasgow were deeply saddened to hear about the passing of Dr Des Gilmore, an honorary lecturer at the University of Glasgow. A reproductive physiologist by trade, Dr Gilmore was a passionate academic and educator, contributing to medical and veterinary research across the globe and training countless generations of future scientists and doctors. Just as remarkable as this was his commitment to student welfare; taking a genuine interest into the livelihoods of his students and offering support using his vast experience.

Arriving in Glasgow in 1972, following a PhD in his native Canterbury, Christchurch and post-doctoral fellowships in London and Massachusetts, he quickly immersed himself in the Glaswegian culture. A keen sportsman, he he joined the University Hares and Hounds Running club where he became Secretary and latterly President; a position he held proudly for thirty-seven years. Des was also a well-known Stevenson gym

attendee and GUSA ball frequenter who always had time for a chat.

Despite retiring in 2006, his commitments to the University never stopped there, choosing to facilitate medicine problem-based-learning sessions and running student selected components such as bouldering. His ability to engage students during these sessions with anecdotes and exhibits was unparalleled.

Des was a man of many stories and a genuine good guy who will be sorely missed. He knew the challenges that surrounded studying in a demanding academic environment and dealt with this in the best way he knew how - good craic.

Reference:

1. University of Glasgow - MyGlasgow - MyGlasgow News - Archives - 2014 - July - Queen's Baton - 21 July [Internet]. Gla.ac.uk. 2025 [cited 2025 Sep 14]. :https://www.gla.ac.uk/myglasgow/news/archives/2014/july/headline_348177_en.html

LESSONS FROM LABOUR WARD: MY TRINIDAD ELECTIVE

By Chloe Danno

When I chose my junior elective, I wanted more than just a change of scenery, I wanted to broaden my perspective. That search took me to Mount Hope Women's Hospital in Trinidad, where I spent four weeks in the Obstetrics and Gynaecology department. The contrast with the UK was immediate.

While the dedication of the staff was unquestionable, the hospital faced significant challenges: outdated equipment, stretched resources, and a public system that left many patients waiting longer than they could afford. For some, the only alternative was private healthcare, an option that came with both faster treatment and a higher price tag. Doctors in the public system often found themselves recommending that option if the patients could afford it, to avoid long delays. It was hard not to draw parallels with the NHS, where long waits are becoming increasingly familiar. Yet what struck me most in Trinidad was not the shortage of resources, but the resilience and ingenuity of the healthcare professionals, for example using hospital gloves as tourniquets for blood draws. These people went above and beyond to deliver timely care, despite the obstacles.

Outside the hospital walls, I had the chance to experience Trinidad. Mornings began with doubles, a delicious local street food staple, while Sundays often ended at Maracas Beach, covered in a generous coating of factor 50. The warmth of the community was just as striking as the island's scenery. On one occasion, a former patient recognised me at the beach, and came over to thank me, sharing an update on her recovery, a simple but powerful reminder of why we go into medicine.

My time in Trinidad was more than just an elective; it was a lesson in adaptability and compassion. I leave with a deeper understanding of global healthcare challenges, a newfound love for Caribbean street food, and the enduring belief that kindness and connection are the true heart of medicine, no matter where you are.

Finally, my sincere thanks to the wonderful staff in Unit C, Mount Hope Women's Hospital, Trinidad for their kindness and invaluable support, and to Dr Craig Napier, Glasgow University for all his help in organizing such a great elective experience.



Chloe spent four weeks at Mount Hope Women's Hospital.

PETS OF THE WOLFSON



Name: Baloo
Owner: Himani Kumar (Year 3)
Age: 4 years old
Funny story: It took us a long time to train him to stop trying to sit on stranger's laps.



Name: Eva
Owner: Sam Hogan-Webb (Student Support Officer)
Age: 4 years old
Funny story: Eva is very averse to rainy weather, so much so, she once walked herself all the way home during a walk as it was pouring it down. I've never seen anything like it, even a ball can't get her to stay out. Paradoxically, she loves swimming and assumes lifeguard duty and swims out to save us from drowning every time. So, falling from the sky water, no, water that's in one big puddle, yes.



Name: Scrabble
Owner: Anna Phin (Year 2)
Age: 2 years old
Funny story: He has more jumpers and instagram followers than me!



Name: Tiramisu
Owner: Laura McDougall (Year 3)
Age: 1 year old
Funny story: He likes to drink apple juice.

PETS OF THE WOLFSON



Name: Ongie

Owner: Jenan Haider (Year 1)

Age: 1 year old

How they met: I found the box tucked against a dustbin in the street, and when I peeked inside, three tiny faces looked back at me. Ongie was there, pressed close to two other kittens, as if they had promised not to be scared as long as they stayed together. I remembered the box had been closed just before, muffling their tiny cries, until I followed the sound and opened it. Someone had left them behind, but in that moment, I knew they weren't lost anymore, they had found me.



Name: Kitku

Owner: Kanishka Megham (Year 5)

Age: 3 years old

Funny story: He once hid inside the hood of a winter coat while it was hung up inside a wardrobe during a party last year and we searched for two hours thinking he had ran away!



Name: Mittens

Owner: Abbie Thomson (Y4)

Age: 14 years old

Funny story: When I had my interview for Glasgow, it was on zoom due to COVID and she meowed so loud and scratched at the door that the interviewer asked to see her. She had a ragdoll as well which was on her lap so technically interviewed for Glasgow Uni too! Medic mittens class of 2026.

MEET THE COMMITTEE

After a long Summer of working hard to produce Surgo, the newly elected committee are excited to share the latest edition with you. With diverse interests and talents, they bring a lot to the table.

Enjoyed the Freshers' Edition? Let us know your thoughts at surgo_uofg@yahoo.com.



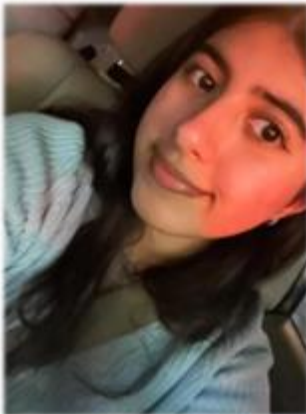
Innes Crawford
Editor-In-Chief

Fun fact: I once got stuck in a washing machine!



Denver Correia
Finance Editor

Fun fact: "I've got a qualification in horse care routine (mainly because it sounded funny)."



Shaha Jaleel
Assistant Editor

Fun fact: "I met Ross Lynch once and apparently don't talk enough about it!"



Chloe Danno
Productions Editor

Fun Fact: "My childhood pet tortoise was named Arthur and ran away twice!"



Nina Kacmarska
Secretary

Fun fact: "I used to live in Australia when I was younger."



Himani Kumar
Arts Editor

Fun Fact: "I had bright red hair for a year!"

TAIL LIGHTS



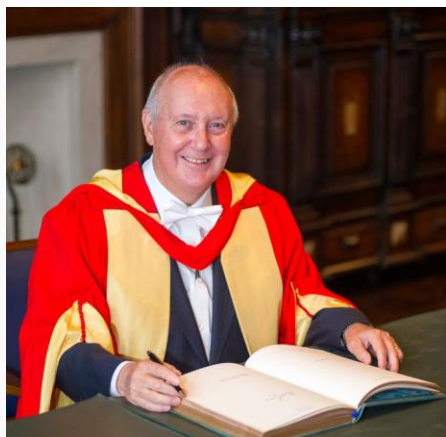
By Professor Cindy Chew

Welcome everyone to the new Academic Year 2025/6.

I hope you have enjoyed the fabulous weather this summer. Big welcome to all the first-year students who are joining the best medical school in the world! (COI: I graduated from UofG). Everyone else – I hope you had a restful summer and are ready for another exciting educational year ahead.

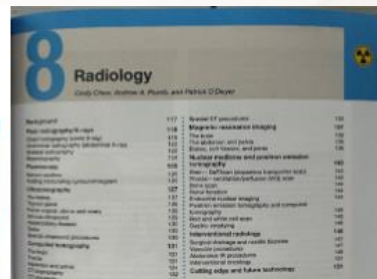
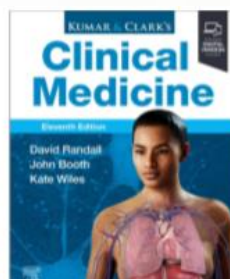
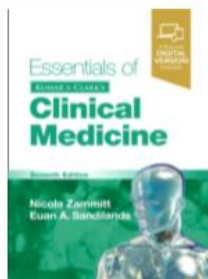
I am very excited to work with Surgo's new Editor-in-Chief **Innes Crawford**. Innes is bursting with new ideas for Surgo and is technically savvy to boot! I cannot wait to see all the great things he will deliver this year.

We all know the Glasgow Coma Scale (GSC), which has revolutionised how doctors around the world manage Head Injury. **Dr Oliver Blatchford** of the **Glasgow-Blatchford Score** (risk of requiring intervention from an upper GI bleed) gives us an insight to his life as a medical student, as part of MedChir and shares valuable advice for medical students today.



Sir Kenneth Calman was Chancellor of the University until 2020²

I am sad to report the recent passing of another inspirational figure - **Professor Sir Kenneth Calman**. Sir Ken fostered and



kept close links with MedChir and Glasgow. When he and Lady Anne came to support our 'Uncertainty work' with Medical students last year – he was sharp as a tack, generous with his time/advice and incredibly supportive. Our condolences to his family. You can read more about Sir Ken's life here:

<https://www.theguardian.com/education/2025/aug/07/sir-kenneth-calman-obituary>

Medicine is grounded in Politics and Policy (see above interview with Sir Ken). You will all be aware of the upcoming Scottish Elections in 2026, while England has just published their 10 Year Plan for Health Services, built on their proposals from 2023. These culminated in reports this summer of 20,000 doctors missing out on training posts: and a decade-high number of doctors leaving the UK. <https://www.itv.com/news/granada/2025-05-07/bma-we-could-potentially-see-thousands-of-unemployed-doctors>

Being good doctors to our patients is fundamentally what we all aspire to – competitive job market or not. To that end – I commend you to find a good book to anchor your studies and learning. Kumar and Clark [continuously published for over 37 years with biennial updates] or the medical student-friendly version *Essentials of Clinical Medicine* might be ones to check out for Medicine (get them free here:

<https://go.exlibris.link/94J4zxyB>,
<https://go.exlibris.link/4yJ9ZZpC>). The latest edition (July 2025) has a new chapter contributed by yours truly – lots of pictures included of course!

Life at university is not all work. Do look to sports, the arts, Unions and MedChir for outlets to meet friends and enjoy life as a medical student in Glasgow!

Finally, don't forget to send in your holiday pictures as Surgo Vision or turn your audits into Visual Abstracts! Top 5 submitted get published, win some money AND compete for the **£100 top prize** at the end of the year.

Until the next Tail Lights, have a fabulous start to the new year and see you at the next MedChir event!

Cindy

References:

1. Oldtimer Fastback And Rear Lamp (158700099).jpeg - Wikimedia Commons [Internet]. Wikimedia.org. 2022 [cited 2025 Sep 14]. [https://commons.wikimedia.org/wiki/File:Oldtimer_Fastback_And_Rear_Lamp_\(158700099\).jpeg](https://commons.wikimedia.org/wiki/File:Oldtimer_Fastback_And_Rear_Lamp_(158700099).jpeg)
2. University of Glasgow - University news - Sir Kenneth Calman [Internet]. Gla.ac.uk. 2025 [cited 2025 Sep 14]. https://www.gla.ac.uk/news/headline_1197845_en.html