LabMedNews

Association for Laboratory Medicine

JUNE 2025

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Association for Laboratory Medicine

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FINAL UPDATE FROM KATH

It was fantastic to see so many of you at LabMedUK25 in Manchester – it's always a privilege to meet so many members in person. Thank you to everyone who made it such a success, especially our speakers, sponsors and the organising team led by Sarah Robinson and the Conferences and Events Committee. If you weren't able to attend, make sure you check out the *Annals* supplement which will be published in July.

A particular highlight was hearing from the UNIVANTS of Healthcare Excellence Award winners, who shared inspiring case studies of transformative best practice. Their work is a powerful reminder of what's possible when lab medicine leads system-wide change. I hope this inspires our members to enter these awards in the future.

We're already planning for LabMedUK26 in Birmingham and want your ideas. What topics, speakers or sessions should be on the programme? Let us know by completing this short form. Your input is invaluable in shaping an event that meets members' needs and ambitions.

In May, I attended EuroMedLab in Brussels, where Bill Bartlett, nominated by LabMed, received the EFLM Award for Scientific Achievements in Laboratory Medicine 2025. This award recognises his outstanding international contributions to training, education, and the development of the EFLM biological variation studies and database. You can read Bill's interview on pages 14-15.

I had the pleasure of joining the panel that closed the conference where I presented the preview video of EuroMedLab London 2027. We look forward to welcoming colleagues from across Europe to the UK.

LabMed was represented by Kam Chatha and Victoria Logan at the Advancing Healthcare Awards, celebrating healthcare scientists and AHPs last month. Alex Yates was one of the judges this year. You can find out more on page 9.

We were deeply saddened to hear of the passing of Bill Fraser. His obituary on pages 52-57 reflects on an extraordinary career and lasting impact on our profession.

I have thoroughly enjoyed my two years as president of LabMed, it has been an honour and a privilege, it has opened up new experiences for me as well as opportunities to promote laboratory medicine and the work of our Association and our members to other organisations in the UK and abroad. I would like to thank Victoria, the staff team and all our members who support the activities of the Association for all their hard work and amazing support. I look forward to working with Ian Godber as our new president who I know will continue to champion LabMed and do an excellent job in taking the Association forward in the coming year.

Looking ahead, we're launching a new webinar series on July 9 with Roche with a session on social value and the new procurement rules.

More chances to connect in person are coming up this autumn:

- Leaders Summit at IBMS Congress – 25 September
- Trainees Day and Freddie Flynn Lecture – 27 November
- Audit Conference – 28 November

I hope to see many of you there.

KATH HAYDEN
President 2024-2025

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LABMED'S NEW STRATEGY: SHAPING THE FUTURE OF LABORATORY MEDICINE

At this year's AGM, LabMed unveiled its new five-year strategy (2025-2029), introduced by our president, Kath Hayden. Building on our strong foundation and growing inclusive membership, this new strategy sets out an ambitious agenda to advance laboratory medicine in a rapidly changing healthcare landscape.

Guided by our vision to advance health and wellbeing in the UK through excellence in laboratory science and innovation, the strategy identifies four key areas where LabMed will drive change:

1. **Digital readiness** – supporting members to harness AI, machine learning and digital systems to enhance patient care and innovation.
2. **Standards and guidance** – ensuring best practice is consistently applied through better access to, and involvement in, national guideline development.
3. **Visibility and leadership** – raising the profile of clinical scientists and empowering members to influence policy, research and public understanding of diagnostics.
4. **Workforce development** – championing career pathways, training and fair recognition to support a thriving and sustainable laboratory workforce.

This strategy was co-developed with members and stakeholders through a collaborative Theory of Change process that reflected on the profession's key challenges, from digital transformation to workforce pressures and imagined what success should look like in 2029.

You can read the full strategy here.

MESSAGE FROM OUR NEW PRESIDENT

I am extremely honoured and excited to be taking over as president of the Association for Laboratory Medicine.

LabMed has evolved in recent years, adapting to advancements within the profession to become a unique and powerful resource for clinical, scientific and professional guidance for those working in laboratory medicine, setting values and standards we should be proud of.

I'm very proud of the work carried out by my predecessor, Kath Hayden, and look forward to continuing this, facilitating the aims of the five-year plan developed by the Association, its directors, committees and membership as a whole.

In terms of my priorities during my term, I will continue to give laboratory medicine and healthcare science the voice it deserves. With collaboration between LabMed, RCPath and IBMS, we can address important issues as they arise and raise the profile of laboratory medicine and the people who work within it.

Education is extremely important to me, with many years of teaching, training and examining experience behind me. I will also continue to work closely with the committees of the Association to address inequalities in training and the availability of training materials. The Laboratory Medicine Learning Academy developed by LabMed is in its infancy but is already getting excellent feedback and we need to build on its success.

Hosting EuroMedLab in London in 2027 also gives us a unique opportunity to showcase the work of Laboratory Medicine in the UK, and working with our members and colleagues in Europe and beyond we can deliver a groundbreaking meeting.

It's really important that we now have a large number of new faces and enthusiastic members engaged with the activities of the Association and I'm really excited to see what the coming years bring; I am looking forward to working with you during my term as president.

Ian Godber, President

LIFE IN THE LAB

Earlier this year, we launched a short podcast series featuring interviews with guests from across the fields of clinical science and laboratory medicine. Hosted by Kam Chatha across 10 episodes, hear stories of leadership, innovation and impact from across the UK and beyond. Listen and subscribe here:
Apple Podcasts Spotify Amazon Music

NEW NATIONAL GUIDANCE STRENGTHENS LAB TEST OVERSIGHT

LabMed, IBMS and RCPath have released joint guidance to help UK labs manage diagnostic test (assay) performance issues more effectively.

Guidance for Laboratories: Investigating and Communicating Assay Performance Issues, outlines a unified, system-level approach to ensure diagnostic tests remain accurate, reliable and safe.

When issues arise with the performance of diagnostic assays, laboratories must act swiftly to maintain quality and transparency. The new guidance provides practical steps for identifying and responding to such concerns, including triage, risk assessment and communication protocols, helping labs minimise disruption to services and uphold patient safety.

We call for greater national oversight and collaboration among clinical, regulatory and industry stakeholders, and highlight the need for clearer reporting standards and propose exploring a mandated national framework to promote consistency across the UK. Coordination between organisations such as UKAS, MHRA and industry bodies like BIVDA and ABHI is seen as vital to managing widespread issues and reducing administrative burdens on laboratories.

Key recommendations also address the role of regulatory certification, procurement practices, and adherence to international standards like ISO 15189. The guidance emphasises that reliable assay performance must be a shared responsibility, supported by robust contracts with suppliers and ongoing performance monitoring.

By following this guidance, laboratories can ensure that assay performance issues are investigated and communicated in a way that safeguards patient care.

"We are committed to upholding the highest clinical performance standards in laboratory medicine. This guidance fills the need for a consistent approach and support for labs when assay performance issues arise that pose a risk to patient safety."

LABMED MEMBERS SHINE AT THE 2025 ADVANCING HEALTHCARE AWARDS

The 2025 Advancing Healthcare Awards (AHA), held on 23 May in London, brought together healthcare professionals from across the UK to celebrate innovation, dedication and impact across the Allied Health Professions and Healthcare Science community. LabMed was proud to see several of our members recognised for their exceptional work.

Chief executive Victoria Logan and director of publications and communications Kam Chatha attended the ceremony, where they joined colleagues in recognising the achievements of healthcare scientists.

A particular highlight was LabMed member Katy Heaney, whose team received the NHS England Chief Scientific Officer's Award for the Outstanding Healthcare Science Service of the Year. The award was presented to the Point of Care Testing Service delivered collaboratively by Frimley Health NHS Foundation Trust, Ashford and St Peters NHS Foundation Trust, Royal Surrey NHS Foundation Trust, Royal Berkshire NHS Foundation Trust, and Surrey and Sussex Healthcare NHS Trust.

We also extend our congratulations to Elaine Cloutman-Green, who was shortlisted for the My Inspiration: The AHCS Award for the Most Inspiring Leader. This category was highly competitive, and her achievement in reaching the shortlist reflects the high regard in which she is held across the sector.

LabMed's director of scientific affairs, Alex Yates, served on the judging panel and reflected on the experience:

"*Being on the judging panel was an inspiring opportunity. Reading the applications for shortlisting really showed the impact that healthcare scientists are making every day. Successful applicants were able to explain their achievements in ways that resonated with judges who may not have specialist knowledge in their field, while also demonstrating their wider significance across healthcare. I had the privilege of sitting on the panel for the 'Inspirational Leader' category. Candidates, joined by their nominators, took part in informal interviews that celebrated their accomplishments with humility and pride. Through my role on the LabMed executive, I know our members are achieving outstanding things every day. I strongly encourage every department to consider submitting nominations in 2025.*"

We look forward to seeing even more LabMed members celebrated at next year's AHA Awards.

A FOND FAREWELL AND A WARM WELCOME: CHANGES AT THE HELM OF THE SACP

There's a big change happening at the Scientific Affairs and Clinical Practice (SACP) committee. After years of dedication, Alexandra Yates is stepping down from her role as director of Scientific Affairs – and what a legacy she leaves behind! While we'll miss her insight, enthusiasm and commitment, we're thrilled to welcome David Gaze as he steps into the role, bringing with him a wealth of experience and a fresh perspective.

We sat down with both Alex and David to reflect on the past, look ahead to the future and find out a couple of fun facts along the way!

What originally drew you to the SACP?

Alex: I was drawn to SACP as a Band 7 biochemist, I wanted to help the profession and gain experience on a national committee.

David: Having served as chair of the Clinical Science Reviews Committee (CSRC) for 10 years, I have sat on SACP and am very familiar with the work of the committee and its integral and central role in the Association for Laboratory Medicine. One highlight of being on the committee is the yearly awarding of the Research and Innovation grants.

Alex, what can your successor expect?

Alex: A really fulfilling role, working with a great committee, that impacts on all aspects of laboratory medicine from routine aspects such as units and reference ranges to helping members with research and innovation.

David, what are you looking forward to?

David: I am looking forward to building the ongoing relationships within the Association through the membership and with our wider stakeholders in industry, regulatory bodies and the NHS leadership as it navigates its new format post NHS England. The development of novel diagnostics is central to patient care and we also need a suitable and sustainable workforce to support this.

Alex, what achievements are you most proud of?

Alex: There are so many projects that I have been lucky to be part of in my time on the SACP, from the introduction of AKI, mass spectrometry specialist interest groups to more recent projects of the NCEPOD sodium guideline. However, I am most proud of enabling the Association values of inclusivity within the committee by widening the participation of our members, ensuring the quality of expert input for the future. In the same vein, Research and Innovation grants (formerly scientific scholarships) to anonymised considerations of applications, minimising potential unconscious bias.

What has your career journey been so far?

Alex: I have been a clinical biochemist for 23 years, working at four different Trusts before recently obtaining a consultant post. I have had specialist interests in renal lab medicine, LC-MS/MS, analytical interference and healthcare inequalities.

Alex Yates

David Gaze

David: My career pathway has focused on academic and clinical research in chemical pathology, spending 20 years at St George's Hospital & Medical School in London before moving into academia, now as senior lecturer in chemical pathology at the University of Westminster, London. My journey has been highlighted recently on the LabMedUK podcast series 'Life in the Lab'.

Tell us something fun about yourselves!

Alex: I'm a busy parent to two amazing children, but try to make time for myself, and really enjoy doing pilates and yoga. I love all things Disney – and my favourite Disney Princess is Belle from Beauty and the Beast, as she is clever, brave and independent – plus has the best dress!!

David: Working life including battling travel into London from Hampshire is often challenging and stressful especially with train disruption. My go to place to relax and unwind is our 57 foot narrow boat *En Avant,* moored on the River Wey in Surrey. This offers peace, calm and tranquillity away from the big smoke, bobbing along at four mph, until something goes wrong, like a strong weir current or a gust of wind, where things get speeded up to 100 mph!

Any final words to our members?

Alex: Everyone is busy but giving a little time to the Association is so rewarding both personally and to your department – I have learned so much and will really miss the SACP.

David: I would like to put on record huge thanks to Alex Yates, my predecessor, and to acknowledge the significant contribution she has made to the SACP and the Association whilst serving as director.

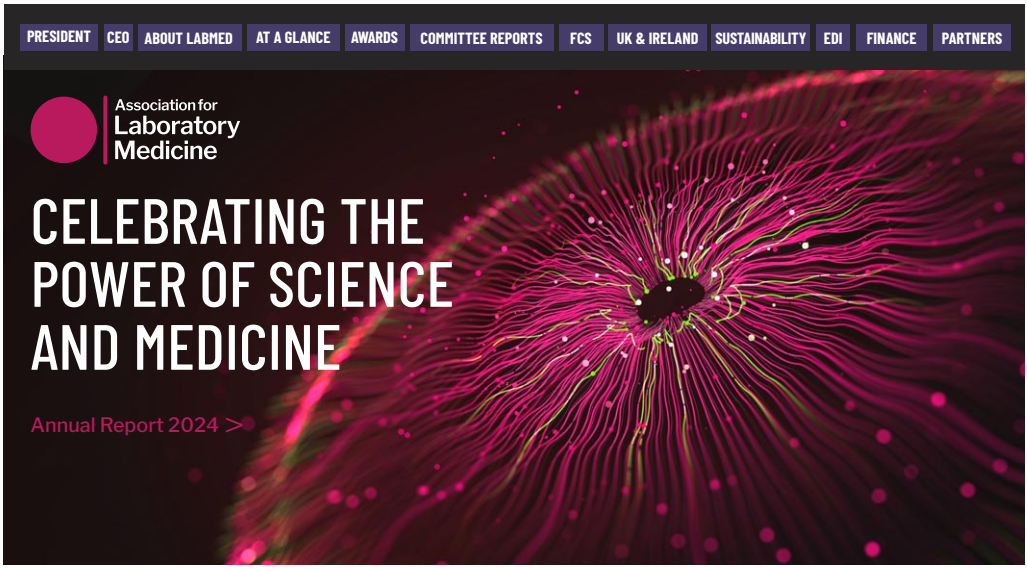
OUR 2024 ANNUAL REPORT IS NOW AVAILABLE

We're pleased to share that the Association for Laboratory Medicine's Annual Report 2024 is now published. This year's report reflects big changes – a change that broadens our reach, strengthens our voice and reflects the evolving role of our profession.

Key highlights from the report include:

- Our response to the NHSE 10-Year Health Plan, championing the role of lab medicine in future healthcare delivery
- Our role in NHSE's sustainable pathology programme
- Improved member access to 30 regional bursaries and free regional events
- Celebrating 20 years of LabTestsOnline UK
- Launching new clinical tools, including a renal resource hub and the Lp(a) taskforce report
- Supporting global education through a THET-funded training project in Ghana, Kenya and Nigeria
- And being selected to host EuroMedLab 2027 in London

You can read the full report here.



UPCOMING EVENTS

Click on the event name to find more information and to book.

- LabMed Southern and UK NEQAS Interpretative Comments Meeting – 23 June 2025
- Driving Impact: Social Value for Laboratory Teams, a joint meeting with LabMed and Roche – 9 July 2025
- LabMed North West Online Regional Audit Award Meeting – 9 July 2025
- LabMed Northern Ireland Scientific Meeting – 19 September 2025
- LabMed Leaders Summit – 25 September 2025
- LabMed Trainees/Freddie Flynn Day – 27 November 2025
- LabMed National Audit Day – 28 November 2025
- LabMed Residential Training Course – 19-21 January 2026

Please take the time to support your regional meetings, especially the in-person events which provide a great chance to network and catch up with colleagues face-to-face.
All regional meetings are now provided to members free of charge and online meetings are available to members nationally. Full details on all our events can be found here.

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“NO MAN IS AN ISLAND”: BILL BARTLETT HONOURED WITH 2025 EFLM AWARD FOR SCIENTIFIC ACHIEVEMENTS

LabMed honorary member, Bill Bartlett, reflects on a career driven by curiosity, collaboration and value-based innovation in laboratory medicine.

Recognition, reflection and responsibility

The news of my nomination – and being one of two recipients of this prestigious award – was astonishing. It is a tremendous honour to be recognised by peers for work considered worthy of such an award.

Throughout my career, I have been fortunate to be surrounded by people who nurtured my curiosity and helped shape me as a scientist. My focus has always been to translate scientific endeavour into real healthcare improvements. In turn, I hope I’ve encouraged others to do the same; to drive innovation in laboratory medicine that delivers measurable patient outcomes and real-world value.

A lifelong connection

I joined LabMed in 1979 and have undertaken roles on regional and national committees over the years. I received the LabMed (formerly ACB) Foundation Award in 2017 and was honoured to be made an honorary member in 2019.

The Association has given me a platform to develop valuable networks with fellow professionals within the NHS and corporate sectors. It enabled me to represent our field on benchmarking and EQA groups, contribute to clinical guideline panels, and take part in regional and national scientific meetings and training courses – both as a learner and an educator. As a national society member of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM), LabMed supported my nomination to become the first chair of the EFLM Biological Variation Working Group. This led to over 12 years of rewarding collaboration with an extraordinary team from across Europe, Scandinavia and the USA.

Though now retired from full-time work, I remain academically active. I hold an honorary appointment as a reader in the School of Science and Engineering at the University of Dundee, review journal submissions, and continue to work as an expert consultant to the Biological Variation Working Group and Technical Committee for the Biological Variation Database.

When not exercising my grey matter, I enjoy rare cloud-free nights spent observing the skies with my 8" Schmidt-Cassegrain telescope, and great days fly fishing for rainbow trout on Scotland's still waters.

What matters most in the progress of laboratory science

Investing in people and education
Involvement in education and training is essential for sustaining and advancing science-based services. Good training benefits both learners and educators. I believe memorable teachers are those who are generous, supportive and who encourage critical thinking. It is vital that trainees are taught to question, not just to memorise. Each generation must focus on continuous improvement, developing services that reflect the best available evidence and technology.

Embracing change through intelligent innovation
Advances in information technology and total laboratory automation have enabled us to challenge convention and push boundaries. Measuring success in terms of outcomes and value – not just efficiency – creates a powerful case for growth. This mindset has been central to my work in laboratory medicine. It has also helped attract investment in targeted, value-driven service innovation.

Creating the right environment for this kind of progress takes time and is not without its challenges. However, value-based service delivery is far more exciting – and impactful – than a system overly focused on cost-cutting.

Value-based thinking, outward-facing action
If laboratory service costs represent only 4-5% of overall healthcare spend, then we stand to gain more by using our insight to drive improvements in the other 95%. That's where real value lies. This requires looking outward and thinking differently – and that, in turn, pushes us to improve how we work.

Getting involved in science and service delivery at every level – local, regional, national and international – has been deeply stimulating. These collaborations expand our understanding, revealing allies for change, and help us to target actions that increase the value and impact of our work.

"No man is an island:" A scientist's journey

I am reminded of John Donne's famous line, "*No man is an island*", and reflect that any achievements I have delivered could not have been attained without the direct and indirect support of a wide range of professional colleagues, friends and family over the years.

A final word of thanks

It is a great honour to be a co-recipient of the EFLM Award for Scientific Achievements in Laboratory Medicine 2025. Over the years, I have been fortunate to benefit from many role models – beginning with Fred Mitchell (now 103), who led the MRC Clinical Chemistry Division at Northwick Park when I took my first post in 1976. Much of what I've achieved has only been possible through the vision and support of diagnostics companies and their knowledgeable staff on the ground. These are the people who have helped bring complex systems into our services and revolutionise how we deliver care. I've found inspiration everywhere – from Nobel Prize winners to lab assistants working in sample reception.

Last, but not least, I must mention my ever-supportive wife Ruth, also a clinical biochemist, who has been a sounding board, a sense checker and a comfort on the difficult days. I owe her much.

LABMED LEADERS SUMMIT COMES TO IBMS CONGRESS 2025

LabMed is proud to present the LabMed Leaders Summit, a high-profile strategic meeting for senior laboratory professionals, taking place on Thursday 25 September 2025 at the ICC Birmingham, as part of this year's IBMS Congress (22-25 September).

This full-day event offers an essential opportunity for senior staff and laboratory managers across all pathology disciplines to come together and engage with some of the big challenges and innovations in the field. From resilience in organisational leadership to digital readiness and sustainability, the programme is packed with insight, expertise and future-facing thinking. Speaker highlights include:

- **Dennis Dunn MBE**, a seasoned NHS leader, known for his transformational leadership at Mid Cheshire Hospitals Foundation Trust.
- **Harriet Unsworth**, a leading researcher at Cancer Research UK, sharing real-world examples of how AI is changing cancer diagnostics.
- **Joseph Alderman**, whose clinical and academic work addresses one of AI's biggest challenges: bias and health inequity in medical technology.
- **Gwen Wark** and **Rachel Marrington**, experts in external quality assessment, offering insight into its evolving role in patient safety.
- **Tim Lang**, highlighting how testing strategies can contribute to, or help mitigate,the environmental impact of healthcare.

These are just some of the expert voices shaping this year's event – expect robust discussions, practical strategies, and new perspectives on the future of laboratory leadership.

WELCOME TO OUR NEW MEMBERS

The Association is proud to introduce the following new members who have joined us since the last edition of *LabMed News*. Please extend a warm welcome to:

Nusreen Ahmad-Saeed, Clinical scientist, Microbiology, Public Health England, Southampton

Angelina Biney, Trainee clinical scientist, Biochemistry, East Kent Hospitals University Foundation Trust, Kent

Emily Budd, Student, Lancashire University, Lancaster

Daniel Casey, Clinical scientist, Pathology, University Hospitals Derby and Burton NHS Foundation Trust, Derbyshire

Tatiana Christmas, Specialist registrar, Clinical Biochemistry, King's College Hospital, London

Agnes Delap, Doctor, Queen Elizabeth Hospital, Medicine, Gateshead

Lauren Donnelly, Senior biomedical scientist, Point-of-Care Testing, Gateshead Health NHS Foundation Trust, Gateshead

Hiba Elsharif, Specialty registrar, Chemical Pathology and Metabolic Medicine, Royal Free London Hospital NHS Trust, London

Jasarat Etzad, STP clinical scientist, Clinical Biochemistry, Northern Care Alliance NHS Foundation Trust, Salford

Amy Goodman, Trainee clinical scientist, Biochemistry, Royal Berkshire Hospital, Reading

Priya Gururajan, Lecturer in clinical biochemistry, Life Sciences, University of Westminster, London

Holly Hughes, Trainee clinical scientist, Biochemistry, Prince Charles Hospital, Merthyr Tydfil

Sara Jenks, Consultant in metabolic medicine, Clinical Biochemistry, NHS Lothian, Edinburgh

Lucille Kavanagh-Wright, Principal clinical biochemist, Biochemistry, Mater Misericordiae University Hospital, Dublin, Republic of Ireland

Rhys Lynch, Trainee clinical scientist, Medical Biochemistry and Immunology, University Hospital of Wales, Cardiff

Carys Morgan, BMS/Trainee clinical biochemist, Biochemistry, Alder Hey Children's NHS Foundation Trust, Liverpool

Alice Ogden, Trainee clinical scientist, Immunology, Pathology Sciences Building, Bristol

Misk Osman, Specialty doctor, Blood Sciences, Newcastle Upon Tyne NHS Foundation Trust, Newcastle upon Tyne

Claire Price, Senior lecturer, Swansea University Medical School, University of Wales & Swansea, Swansea

Jennie Raven, Trainee clinical scientist, Clinical Biochemistry, York and Scarborough Teaching Hospitals NHS Trust, Hull

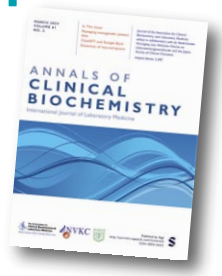
Zaynah Raza, Trainee clinical scientist, Clinical Biochemistry, John Radcliffe Hospital, Oxford

Georgia Savage, Trainee clinical biochemist, Biochemistry, Northampton General Hospital NHS Trust, Northampton

CONDOLENCES

It is with regret that we must inform you of the sad news of retired member Bernard Rocks who passed on 15 May 2025. Dr Rocks joined the Association in 1975 and during this time, he held the roles of regional tutor for SE Thames from 1989-1992 and workforce advisory committee representative for the Southern Region from 2002-2004. An obituary will be published in a future issue of *LabMed News*.

ANNALS OF CLINICAL BIOCHEMISTRY LATEST RESEARCH ARTICLES



Check out these interesting new articles recommended for reading by the editors-in-chief of the *Annals of Clinical Biochemistry*:

The effect of inadequate drying of blood spots on newborn screening analyte concentrations – Stuart J Moat, Melissa Levi, Margaret Birch, Nadia Worlock, Chandra Sundas, Lucy Woodcock, Jude Kay, Sikha de Souza, Annabel Rodham, 2025.

Investigating the effect of icterus interference on a creatinine Roche enzymatic methodology – Kelsey S Spencer, Louise E Duvall, 2025.

Click here to submit your work to the *Annals of Clinical Biochemistry.*

LIKE THE REVIEWS IN THE ANNALS?

Do you like reading the reviews in the Annals? Do you want a say in what is included? Would you like to get an introduction to the publication process and earn CPD College points for reviewing articles?

The Clinical Sciences Reviews Committee (CSRC) is currently seeking new membership from enthusiastic LabMed members. Previous publication experience is desirable but not essential. We would also welcome interest from members specialising in haematology, medical microbiology/virology and immunology.

The CSRC commissions reviews from leading national and international experts from all disciplines of laboratory medicine. The committee works with the authors to define the scope and style of the article, peer review drafts and format the manuscript ready for submission. This friendly committee meets three times a year either at Tooley Street, or online, as a hybrid approach to allow those to join who cannot easily get to London.

If you are interested in applying, or require further information, please email the CSRC Chair, David Gaze on d.gaze@westminster.ac.uk or CSRC Secretary Katharine Bates on katharine.bates@nhs.net.

PUBLICATION DATE

LabMed News is published on the 15th of the month. To guarantee publication, please submit your article by the 15th of the preceding month (i.e. 15th July for the August 2025 issue) to: editor.labmednews@labmed.org.uk

We aim to be as flexible as possible and will try to accept articles up to the 1st of the month to be published if space allows. Otherwise they will be held over to the next issue. If we are aware that articles are imminent, this gives us more flexibility and we can reserve space in anticipation. If in doubt, please contact: Gina Frederick, lead editor, via the above email.

CHANGES TO TRADE UNION RULES AND BYE-LAWS APPROVED BY MEMBERS

Following a member survey in 2023 and a subsequent review by a dedicated task and finish group, the Association for Laboratory Medicine launched a consultation between 16 April and 2 May 2025. This invited responses from all UK-based members in the Member and Federation categories.

At the Annual General Meeting (AGM) held on 11 June 2025, members voted to approve significant changes to our trade union rules and bye-laws. These included:

Removal of Rule 2, which previously stated: "Industrial action: Neither the Committee, nor any Officer or official of the Federation, nor any grouping of members of the Federation shall be empowered to initiate or be party to the withdrawal of labour of members of the Federation in furtherance of an industrial dispute."

Amendment to Bye-Law 2, which now provides that: "In respect of issues relating to the pay and conditions of service of members, the Committee shall organise, as necessary, in partnership with workplace representatives, secret ballots of members directly affected by the particular issue, for industrial action up to and including withdrawal of labour. The ballot of such members shall be conducted in accordance with the procedure regarding ballots in the bye-laws of the Association and relevant UK legislation (where appropriate)."

Of those casting their vote at the AGM, the resolution passed with 90% in favour and 10% against.

These changes mark a significant development in our trade union's ability to support members in matters of pay and working conditions. While this now allows for the possibility of industrial action, it also brings important responsibilities. Preparatory work is underway to ensure we meet all legal and procedural requirements. We urge all UK-based members to log in to their LabMed account and ensure their contact details, including postal addresses, are accurate and up to date.

Changes to the trade union name

Members at the AGM also agreed that the Association will now operate under a single name, the Association for Laboratory Medicine, and no longer use the separate title of Federation of Clinical Scientists. This reflects our registered name with the certification officer and brings greater clarity to the governance of and communications about our trade union activity.

A full review of our governance documents is underway. Proposals to align the Union and Association structures more closely will be presented at an Extraordinary General Meeting, anticipated for November 2025. More details will be shared in due course.

TRADE UNION TRAINING SERIES

We've listened to feedback from members and reps about the topics for our training sessions and are pleased to be offering the following series in 2025. Our May session on Job Evaluation attracted more than three times our usual attendance – a fantastic sign of growing engagement. A recording is now available on our website for those who missed it on our site.

Upcoming sessions include:

Organisational change

27 June 2025, 2pm – MS Teams

We'll explore what constitutes organisational change, the standards we expect from employers, and how members can engage with these processes through local reps. We'll also discuss relevant policies and Agenda for Change guidance.

National picture on pay and union negotiation

17 September 2025, 10am – MS Teams

This session will provide an overview of national pay developments and legislative changes affecting members. We'll also discuss the implications of the new right to withdraw labour and what it may mean for future negotiations.

Additional sessions will be announced soon – all members and reps are welcome to attend.

Trade union

Make a difference: Join our network of union reps

There's never been a more important time to step up and help ensure our members are represented effectively across all workplaces.

Local union reps receive full support from:

- The LabMed staff team
- The LabMed Trade Union National Committee
- Contracted union and legal support for complex cases
- A library of resources, guidance and bespoke training

Becoming a rep is a valuable way to develop your leadership, negotiation and problem-solving skills – all while making a meaningful difference for colleagues.

Interested? Contact your regional rep or our membership manager at mike@labmed.org.uk to find out more.

Association for Laboratory Medicine

CONFERENCE REPORT

LABMEDUK25 - MANCHESTER

This year's LabMedUK conference brought together laboratory professionals, researchers and innovators from across the laboratory medicine community for two packed days of discussion, debate and learning.

The event opened on Tuesday with a warm welcome from the LabMed president Kath Hayden, followed by an update from Mario Plebani, president of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM). Mario delivered an inspiring International Award Lecture focusing on harmonising the post-analytical phase including the need for us to develop personalised reference ranges. Delegates then explored the hot topic of AI in our field in the highly anticipated LabMed Debate, while others delved into new insights in neurology.

The programme continued with the RCPath Freddie Flynn Award presentation by Wiebke Arlt showcasing advances in steroid metabolomics, and a lunchtime spotlight on posters, industry-sponsored workshops and the opportunity to discover what's new from our sponsors and exhibitors. The afternoon showcased our delegates in training with the Medal Award presentations and specialist sessions in immunology, before concluding with a plenary on global excellence in healthcare, featuring transformative case studies from the 2025 UNIVANTS of Healthcare Excellence Award Programme.

Wednesday's programme maintained the momentum, kicking off with the thought-provoking Laboratory Medicine Foundation Award lecture from Eric Kilpatrick on medical freakonomics, illustrating the power of harnessing data to better inform laboratory practice, followed by a deep dive into inherited metabolic diseases and the evolving potential of point-of-care testing in non-traditional settings. The day's parallel sessions also explored common analytes and the critical impact of laboratory medicine on health inequalities.

After lunch, poster spotlights and further networking with exhibitors and industry workshops, delegates gathered for the LabMed and FCS Annual General Meetings, the insightful Impact Award plenary from Finlay MacKenzie and Rachel Marrington on Patient-centric EQA, and a lively session featuring the ever popular clinical case presentations chaired by Danielle Freedman.

The conference concluded with a closing ceremony that celebrated the achievements of our award winners. Congratulations to: Medal Award winner Emma Ashley and runner-up Sally Hanton; the Poster Prize winners voted by delegates: Grainne Daly (Tuesday) and Laura Cook (Wednesday); and Clinical Cases winner Sophie Rothwell-Mason and runner-up Laura Bernstone. This year the President's Shield was awarded to Hazel Borthwick for her huge contribution to education and training and the development of the Learning Academy.

The conference closed with a warm welcome to our new president Ian Godber.

KATH HAYDEN

Past president of the Association for Laboratory Medicine

A HEARTFELT THANK YOU TO OUR SPONSORS AND CHARITY PARTNER

LabMedUK25 extends its sincerest gratitude to the sponsors whose generous support made the conference possible:

- **Gold Sponsors: Abbott, Roche**
- **Silver Sponsors: BD, Biohit, Snibe, Siemens Healthineers**

Their commitment to innovation and excellence in laboratory medicine was instrumental in the event's success.

The conference was also proud to support Manchester Women's Aid, a charity dedicated to helping survivors of domestic abuse. Attendees contributed by donating new, packaged items such as vouchers, toiletries and toys to support those in refuge and temporary accommodation. Together, the community demonstrated the power of collaboration, not only in healthcare but also in creating meaningful social impact.

LIVING OUR VALUES: LABMED DONATES TO MANCHESTER WOMEN'S AID

As part of living our Association's values, we were really pleased to work this year with Manchester Women's Aid in Manchester for LabMedUK25.

Manchester Women's Aid, part of The Pankhurst Trust, offers help to provide a holistic, safety-first approach to those affected by domestic abuse. They empower survivors by providing refuge, community-based support and safe spaces. Over the last ten years, their work has impacted the lives of over 30,000 adults and children helping them to live a life free from domestic abuse.

We asked conference delegates to bring donations to conference and we were delighted that staff from Manchester Women's Aid were able to participate with a stand in our exhibition to talk about their work.

We received the following message from Ashleigh, one of the project managers after the event: *"Thank you so much for having us, we are incredibly grateful for the support and everyone we met was so kind and generous. I've calculated the value of the donations made at the conference at £513! There were so many thoughtful gifts too, which will make the women and children in our services so incredibly happy so thank you!*

If anyone would like to make further donations, they can send items to the following address: The Pankhurst Centre, 60-62 Nelson Street, Manchester, M13 9WP."

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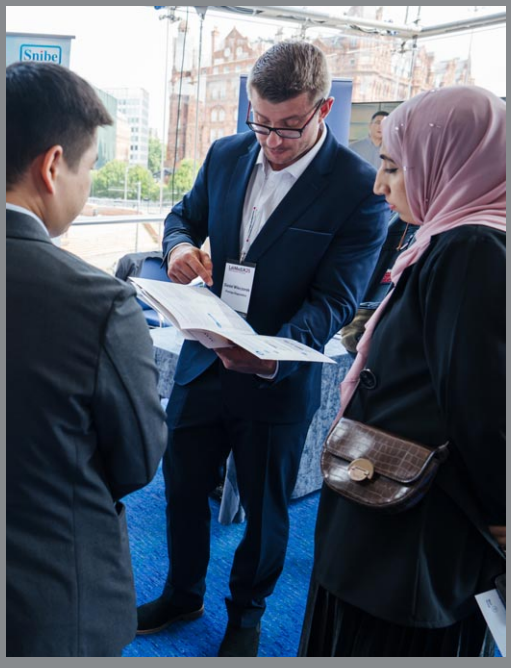


Siemens Healthineers

LABMEDUK25 AWARDS: HONOURING EXCELLENCE ACROSS THE SPECTRUM

LabMedUK25 celebrated outstanding achievements in laboratory medicine through a series of prestigious awards:

- **Impact Award:** Rachel Marrington and Finlay Mackenzie
- **Laboratory Medicine Foundation Award:** Eric Kilpatrick
- **International Award:** Mario Plebani
- **Medal Award:** Emma Ashley
- **Clinical Cases:** Sophie Rothwell Mason
- **Poster Showcase:** George Allen, Shaun Chowdury, Becky Hopkins, Foteini Mastorakou
- **Poster of the Day: Tuesday** – Gainne Daly, **Wednesday** – Laura Cook

These awards were presented during dedicated sessions, giving attendees the chance to celebrate their peers' accomplishments and gain insights from their exceptional work.

Impact Award winners: Rachel Marrington, Consultant EQA Scientist and Deputy Director, Birmingham Quality; and Finlay MacKenzie, Director and Lead Scientist of Birmingham Quality

International Award winner: Mario Plebani, Professor of Clinical Biochemistry and Clinical Molecular Biology at the School of Medicine, University of Padova, and Chief of the Department of Laboratory Medicine at the University-Hospital of Padova

Presidents Shield: Hazel Borthwick, Clinical scientist, County Durham and Darlington NHS Foundation Trust

Foundation Award winner: Eric Kilpatrick, Consultant, Chemical Pathology, Wythenshawe Hospital, Manchester

Clinical Cases winner: Sophie Rothwell Mason, Senior clinical scientist, Manchester University NHS Foundation Trust

Clinical Cases runner-up: Laura Bernstone, Principal clinical scientist, County Durham and Darlington NHS Foundation Trust

Freddie Flynn Award: Wiebke Arlt, Director of the MRC London Institute of Medical Sciences and Head of the Institute of Clinical Sciences at Imperial College London

Medal Award : Emma Ashley, Clinical biochemist, Kingston Hospital NHS Foundation Trust

LabMed Director of Scientific Affairs, David Gaze, reading two of our Poster Showcase winner posters from George Allen, Principal clinical scientist, Royal Devon and Exeter NHS Foundation Trust, and Shaun Chowdhury, Trainee clinical scientist, Royal Berkshire NHS Foundation Trust

Becky Hopkins, Senior clinical scientist, Bristol Royal Infirmary, presenting her Poster Showcase winner

UNIVANTS OF HEALTHCARE EXCELLENCE AWARDS: CELEBRATING INNOVATION IN LABORATORY MEDICINE

LabMedUK25 proudly hosted the prestigious UNIVANTS of Healthcare Excellence Awards, recognising exemplary integrated care initiatives that had measurably improved patient outcomes. This collaboration with UNIVANTS and Abbott underscored the conference's commitment to advancing laboratory medicine. The awards ceremony spotlighted groundbreaking projects that exemplified the power of interdisciplinary collaboration in healthcare. Attendees had the opportunity to learn from presentations detailing these initiatives, offering valuable lessons and inspiration for professionals across the field. Recognised for their transformative contributions to healthcare, this year's UNIVANTS winners were:

- **Nobuharu Tamiki, Physician, Department of Gastroenterology and Hepatology, Musashino Red Cross Hospital, Japan; and Maki Furuya, Lab Technician, Department of Laboratory Medicine, Musashino Red Cross Hospital, Japan**
  The pathway to HCV elimination: multidisciplinary team effort for improved identification, diagnosis and treatment of HCV positive patients
- **Vincent Sapin, Professor and Head of Biochemistry and Molecular Genetics, Centre Hospitalier Universitaire of Clermont-Ferrand, France; and Jeannot Schmidt, Professor and Head of Emergency Department, Centre Hospitalier Universitaire of Clermont-Ferrand, France**
  Improved management of patients with high LDL-C through electronic health record-directed algorithms for guideline-concordant high-intensity statin prescribing
- **María Teresa Concepción Masip, Medical Specialist in Clinical Biochemistry, Complejo Hospitalario Universitario Nuestra Señora de Candelaria, Spain; and Pilar González Romero, Family Medicine Physician and Emergency Department Physician Complejo Hospitalario Universitario Nuestra Señora de Candelaria, Spain**
  Radiation reduction: increased safety and length of stay for improved patients with suspected mild traumatic brain injury in the Emergency Department

GOT AN IDEA FOR LABMEDUK26? WE WANT TO HEAR FROM YOU!

This year's LabMedUK programme was a great success thanks to the excellent ideas submitted by our members. Now, we're getting ready for next year's event in Birmingham from 8–10 June 2026, and we want your input.

- Do you have a session topic in mind?
- Know a speaker who should be on our stage?
- Interested in organising or chairing a session?

Let us know.

Submit your suggestions by 30 June 2025 using this form. Whether it's a rough concept, a fully formed idea, or a simple recommendation we welcome it all. You don't need to complete every section of the form, just share what you've got.

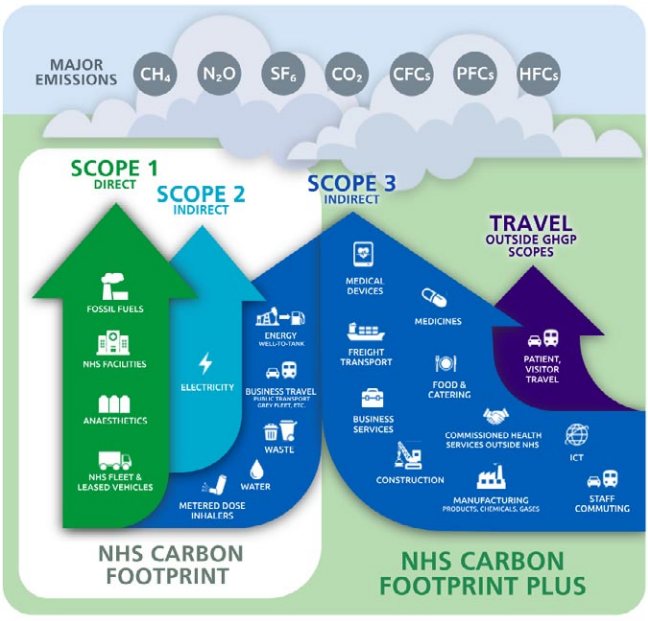
Every suggestion will be reviewed at our July planning meeting, and we'll be in touch if we need more details. Help shape another outstanding LabMedUK programme!

HOW TO EMBED SUSTAINABILITY IN YOUR LABORATORY INDUCTION PROGRAMME

Every medical laboratory that is UKAS accredited to the ISO 15189 standards must have an effective induction programme. Induction is a key part of helping new employees become familiar with their new department, employer and role.

In addition to this, the induction process is an opportunity to make new employees feel welcome and to learn about the culture and values of your organisation and department.

NHS England have committed to achieving net zero for the emissions it controls directly (the NHS Carbon Footprint) by 2040, with an ambition to reach an 80% reduction by 2028 to 2032. For the emissions influenced by the NHS (the NHS Carbon Footprint plus), the target timescale is 2045, with an ambition to reach an 80% reduction by 2036 to 2039 (Greener NHS » Delivering a net zero NHS). Similar targets are in place



NHS England Scope 1, 2 and 3 emissions

ALISON JONES

Consultant clinical biochemist, SHYPS

With thanks to Rob Shorten (Lancaster Teaching Hospitals) and Jennifer Collins and Joanne Hall (Newcastle Hospitals NHS Foundation Trust)

for NHS Scotland (NHS Scotland climate emergency and sustainability strategy: 2022-2026 - gov.scot) and NHS Wales (NHS Wales Decarbonisation Strategic Delivery Plan). The Northern Ireland Climate Change Act (2022) (Introduction to the Northern Ireland Climate Change Act | Climate NI) contains a legal requirement for all public bodies, including health trusts, in Northern Ireland to ensure that targets and carbon budgets are met.

The challenge is huge, but every individual member of staff can play their part in making a difference. NHS England has over 1.5 million employees, so even small changes will add up if adopted by enough people. By including sustainability in your departmental (or even Trust) induction programme, you can show staff that sustainability is embedded as a core value of the NHS, and encourage your teams to consider how their actions can influence climate change.

Below are some suggestions for how you can incorporate sustainability into your induction programme:

- Provide a short introduction to explain why sustainability is important, e.g.
  - Climate change poses a major threat to our health as well as our planet. The environment is changing, this change is accelerating and presents direct and immediate consequences for our patients, the public and the NHS.
  - The NHS aims to be the world's first net zero national health service by 2040.
  - To achieve this, all areas of the NHS need to engage in sustainability initiatives and activities to reduce waste and energy consumption.
  - Laboratories are extremely energy and resource intensive. Data suggests that laboratories typically consume 3-10 times more energy than non-lab areas.
- Highlight day-to-day things, e.g.

- Provide information about projects already done (e.g. turn off lights/traffic lights/screen savers/recycling and waste) and those in progress.
- Introduce your Green Champions and explain how to get involved. Highlight existing lab-resources such as sustainability notice boards, Green Champions e-mail groups or MS Teams groups.

- Utilise existing resources: NHS England, in conjunction with the Centre for Sustainable Healthcare, have produced an e-learning module called 'Building a Net Zero NHS', which is accessible to all NHS staff. (Environmentally Sustainable Healthcare - elearning for healthcare)
- Provide links to other resources, e.g.
  - Greener NHS
  - Greener NHS » Delivering a net zero NHS
  - Greener NHS » National ambition
  - Greener NHS » Take action

Images courtesy of the SHYPS Training Team

Remember to keep it brief. Induction programmes contain a lot of information. I would suggest just one or two slides in your induction package which will let your new starter know that sustainability is important in your department, list a few key things that they can do day-to-day and signpost them to further information and/or your Green Champions.

If you have any suggestions or examples about how to incorporate sustainability into your induction programme, then please let the LabMed Green Champions know, at Green Champions.

TIME FOR QUALITY IS TIME FOR PATIENTS

I was asked recently what a quality service means to me and a colleague reflected that they had been asked if quality management was just a tick box for UKAS. There have certainly been times in my early career when I would have struggled with the answer and certainly felt a heavy tick-box approach to the work I was asked to do, but now, no longer.

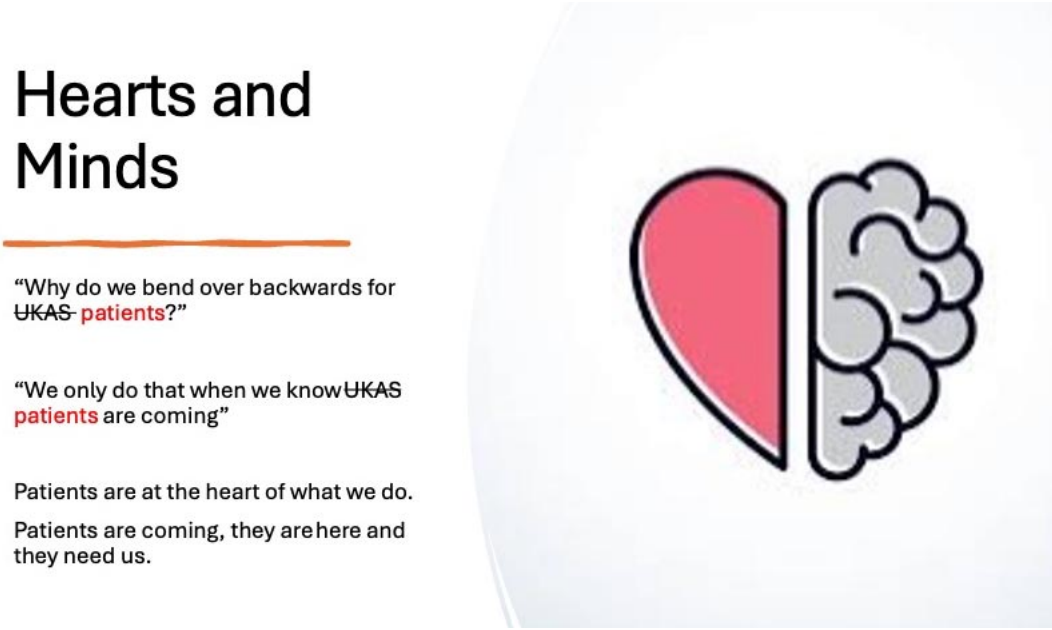
A high quality service is what my patients deserve, it is what I believe every individual who requires the care of their health from the NHS deserves. Today I provide you with some reflections and insight on my own growth journey with a quality management system and how I see more and more its importance to the care we provide to patients.

KATY HEANEY

POCT speciality lead, consultant biochemist, Berkshire and Surrey Pathology services and chief healthcare scientist, Frimley Health NHS Foundation Trust

Time for discussion

I don't believe there is any perfect system out there for recording incidents. They all have their nuance, limitations and compromises. I do believe we can get caught up with trending for data, rather than looking at detail and improvement. In my own service we had a very full agenda



for our quality meetings and seemed unable to find time to really get into the “so what” or the “what are we going to do about it?”. When we discussed incidents it was a numerical exercise on how many, what categories and whether they were overdue. Trying to focus on an “incident of the month”, (not a celebration of, but a focused in depth look at and learn about), didn’t seem to make a dent or change. Incidents were not the only thing on our agenda feeling the pinch for time. Internal quality control monitoring, external quality assessment reporting, risk management, external incidents, change controls were all being squeezed into a “conscious of time” section that wasn’t really allowing us to learn, assess and grow. Meetings were overrunning and staff were tired.

So we took the plunge. We separated out our quality meetings and split them into four separate meetings:

1. IQC / EQA
2. Incidents / risk
3. Change control
4. Main Quality meeting (to cover other bits and bobs!)

What has been interesting is seeing them develop their own cadence, content and pace. IQC and EQA is where I see my Biomedical Scientists shine. The data review, the trending and the use of some excellent excel sheets have enabled documented in depth analysis. And while at times it seems to expand and expand, it has certainly pulled out some really wriggly worms that would otherwise have remained canned in the cupboard.

Time allowed for risk register review beyond the most senior of our team has given the opportunity for staff to understand the value of the register, the importance of their updates and the recognition of other matters for raising on the register. Incidents, we still sometimes return to a numerical view but an audit of a years’ worth of one type of incident record has given us great insight into how we record, the value of recording well and how well or not well we record the impact on patients. An important part ultimately of the ISO 15189; 2022 standards.

Annual Management Review

It is a whopper isn’t it! The data and the full circle of service review. One of my pet peeves is being asked to produce a report for a meeting, but being placed in the bottom part of the agenda. By the time

The Point of care testing team at Berkshire and Surrey Pathology Services at the annual management review

your turn approaches the clock has run out and you have two minutes for a report that took longer to produce than the entire meeting took.

Producing reports in advance is key and can be tricky for some. We aim to provide four weeks clear notice for those producing reports and then an additional week prior to the meeting to allow the attendees to read them. But it is hard and firefighting does sometimes take priority.

This year I requested five hours for our annual management review. We booked a room, face-to-face, brought all the snacks, a comfort coffee break and a 30 minute lunch break were all factored in. We invited some lower grade staff to give them the chance to experience an AMR and contribute to the conversation around the service. We recorded the meeting, had notes taken throughout and focused ourselves on the key points;

a) the effectiveness of the management system and its processes.
b) improvement of the laboratory activities related to the fulfilment of the requirements of 15189:2022
c) provision of required resources.
d) improvement of services to patients and users.
e) any need for change.

I reflect on the result. It became a day of shared knowledge, time to share our experiences and to make consensus agreed changes to our services. We talked about how challenged our staff were and how often they felt pressure to work over hours. We talked about our successes and agreed next year we would add (yes add!) to the AMR agenda a list of our noted achievements for the year. We talked about the impact of changing our quality meeting structure and I am certain that having done so our AMR reports were far more detailed and well understood by the group, as there had been time throughout the year to understand and discuss the detail.
We finished with four minutes to spare. There was no rush, no hurrying along and every report, and in turn every staff member, was given their time.

Time

In my mind, giving time to quality is giving time to my patients. The higher the quality of my service, the better my patients are served. This isn't always in everybody's gift to give, but for those in responsibility, I hope this helps you reflect and for those in training and approaching those responsible roles please take it with you; our patients need our time.

ESCMID GLOBAL 2025 THROUGH THE EYES OF A FIRST-TIME ATTENDEE

IJEOMA OKOLIEGBE
Clinical scientist, Department of Infection Prevention and Control Aberdeen Royal Infirmary, Aberdeen

Attending ESCMID (European Society of Clinical Microbiology and Infectious Diseases) Global 2025 in Vienna as a first-time participant was not only an academic milestone but also a deeply personal and professional goal, as I had in previous years watched how social media will light up with several hashtags during each congress. So, with high expectations, I arrived prepared to immerse myself in five days (11-15 April 2025) of science, collaboration and global dialogue. With over nine tracks (antimicrobial resistance, antimicrobials, clinical, diagnostics, infection control, public health and emerging infections, professional and career, translational, vaccinology and immunology) what I experienced exceeded even my most optimistic projections.

Some of the sessions I found intriguing included: **The Trial Run: recent trials on *Staphylococcus aureus* bacteraemia management.** Chaired by Julia Bielicki and Vance Fowler, it comprised of two oral presentations from the randomised controlled trial of the *S. aureus* network adaptive platform (SNAP). These presentations were Benzylpenicillin versus (flu)cloxacillin for the treatment of penicillin-susceptible *S. aureus* bacteraemia by Steven Tong and Joshua Davis' presentation on Cefazolin versus (flu)cloxacillin for the treatment of penicillin-resistant, methicillin-susceptible *S. aureus* bacteraemia. Additionally, data was also presented by Xavier Lescure on the Cloxacillin versus cefazolin for methicillin-susceptible *S. aureus* bacteraemia (CloCeBa) trial.

The SNAP trial is an international, multi-centre study evaluating optimal antibiotic therapy for *S. aureus* bacteraemia (SAB). It compared cefazolin versus flucloxacillin for methicillin-susceptible *S. aureus* (MSSA) and penicillin versus flucloxacillin for penicillin-susceptible *S. aureus* (PSSA). Key findings included:

- Cefazolin was non-inferior to flucloxacillin for 90-day mortality in MSSA bacteraemia, with lower rates of acute kidney injury and early mortality.

- Penicillin was non-inferior to flucloxacillin in PSSA bacteraemia, also demonstrating significantly lower rates of acute kidney injury.

These results suggest that cefazolin and penicillin may be safer alternatives to flucloxacillin in treating *S. aureus* bacteraemia. Similarly, findings from the CloCeBa randomised, controlled, non-inferiority trial mirrored the SNAP trial with cefazolin efficacy non-inferior to cloxacillin, with a trend toward a lower rate of patients experiencing any serious adverse event. Interestingly, they explored the role of BlaZ gene although it was not statistically significant.

Vance Fowler, in his clinical commentary, welcomed the increase in trials for SAB while exploring the clinical impact of trial results on PSSA, MSSA (Pen-R). Furthermore, he highlighted unresolved concepts such as the role of *Blaz*A, Inoculum effect, the use of cefazolin versus benzyl penicillin for PSSA and cefazolin for CNS infections. I particularly found his and Julia Bielicki's commentaries on the differences, audience and goals of several trial designs very helpful.

Metagenomics, a current theme which is reshaping the future of clinical microbiology, infectious disease surveillance and antimicrobial resistance monitoring was also explored. By enabling precise, rapid and comprehensive insights into microbial communities, it was concluded that metagenomics bridges the gaps that culture-based and targeted molecular tests cannot fill. Sessions included 'Translating metagenomics into clinical practice', 'Cut a long story short: choosing NGS platforms' and 'Implementing metagenomics in my lab and mistakes to avoid'. Collectively, it was recognised at each session that the integration of metagenomics into routine practice was not a question of "if", but "how fast" and "how equitably" it can be achieved. The path forward requires not just technological advancement, but also investments in education, infrastructure, ethical frameworks and global cooperation.

Ijeoma Okoliegbe with Stephen Kidd

Another notable session titled "We need to talk about toilets…" delved into how the healthcare built environment influences infection prevention especially the least explored role of toilets in healthcare acquired infections. Experts discussed optimising hospital design, the role of ventilation and healthcare practices such as hand hygiene practices as potential transmission mechanisms that could present as infection risks for users in a healthcare toilet. The discussion reinforced aerosol generation during flushing, ventilation shortcomings as well as the crucial need to understand the role of cleaning and disinfection in the prevention of healthcare acquired infections.

Finally, the conference emphasised the importance of implementation science in infection prevention and control (IPC). Sessions focused on understanding organisational culture, prioritising IPC activities and applying strategies such as

the **No**rmalisation Me**A**sure **D**evelopment questionnaire (NoMAD) tool. This tool is used in Normalisation Process Theory to understand the dynamics of implementing, embedding and integrating new technology or complex intervention. These discussions which explored barriers and facilitators such as need, capability, opportunity and motivation aimed to equip healthcare professionals with practical tools to enhance IPC practices in their institutions.

The breadth and quality of the sessions were remarkable. From the keynotes, symposia, open forums, workshops, or educational/case/oral sessions, each delivered cutting-edge findings with clear clinical relevance. Particularly invaluable for me were the presentations on antimicrobial stewardship, IPC implementation, diagnostic and translational topics that resonate with early-career clinicians and researchers alike.

During the congress, a few conversations with early career practitioners recognised that the ESCMID Mobile Lab and Young Investigator Workshop were standouts. The chance to gain hands-on microscopy skills at beginner and advanced levels helped bridge the gap between classroom theory and real-world application. Even the Selective Pressure quiz show, while playful in tone, turned out to be a fun and effective way to reinforce concepts and interact with fellow attendees.

Networking, which I had initially viewed with some anxiety, became one of the most rewarding aspects of the week. The ESCMID Networking Corner and affiliated society events created a welcoming environment where I could meet researchers, policy advocates and clinicians from around the world. Several conversations led to promises of future collaboration, including grant applications, co-authoring policy documents and mutual lab visits. The conference's commitment to sustainability and its implementation reflected thoughtful environmental planning. Several approaches such as the choice of Messe Wien Exhibition and Congress Centre which has held the 'Environmental label for Conference and Event Locations' (UZ200) since 2024, live-streaming options, eco-friendly catering, digital programme and the free Vienna public transport pass highlighted the environmentally responsible event planning. As a visitor to Vienna, the transport pass alone enhanced my mobility and lowered my carbon footprint without me having to think about it.

ESCMID Global 2025 was more than a conference – it was a comprehensive introduction to a professional community, a laboratory of interdisciplinary innovation, and a model for how science, public health and sustainability can coexist.

Looking back, I was grateful the months leading up to the conference were spent studying the programme, reaching out on several social media as well as on the conference app, and building a personalised agenda. This groundwork proved invaluable. Having a clear set of objectives helped me stay focused, while mapping out key sessions and planning social interactions gave me the confidence to engage deeply from day one. As a newcomer, this strategy transformed what could have been an overwhelming experience into one that felt intentional and empowering.

For a first-time attendee, the experience was both grounding and exciting. I left Vienna not only more knowledgeable, but also more connected, more inspired and more determined to contribute meaningfully to the field. I would strongly recommend any early-career scientist, clinician or public health professional to attend – armed with curiosity, a well-planned agenda, and an open mind. ESCMID Global is where learning accelerates and possibilities expand.

THE MICROBIOLOGY SOCIETY ANNUAL CONFERENCE 2025

Attending the Microbiology Society Annual Conference 2025 at Liverpool's ACC from 31 March to 3 April was a vibrant, immersive experience with delegates attending from across the globe. With over 1,250 registered participants, the conference offered a dynamic blend of scientific discovery, professional development and community engagement, making it a highlight in the microbiology calendar.

MATHEW DIGGLE

Clinical microbiologist, associate professor and director of the Clinical Microbiology Fellowship Programme, University of Alberta Hospital, Canada; and deputy editor-in-chief, Journal of Medical Microbiology

Upon arrival at the ACC Liverpool, attendees were greeted by a welcoming atmosphere, with familiar faces and new acquaintances mingling in the bustling registration area. For many, this was a return to a familiar event, while for others, such as myself, who travelled from the West of Canada, it was my first foray into the Society's annual conference.

The conference opened with an address from Gordon Dougan, the Society's president, who emphasised the Society's commitment to inclusivity, community and the advancement of microbiology. The president encouraged attendees to engage with the Society's various initiatives, join committees and share their research to benefit the community. This message set the tone for a collaborative and supportive week ahead.

The heart of the conference lay in its extensive scientific programme. Each day featured a packed schedule of symposia, workshops, fora and professional development sessions, catering to a wide range of interests and career stages. Topics spanned the breadth of microbiology, from antimicrobial resistance (AMR) mechanisms and regulation, one of the year's central themes, to the intersection of climate change and viral emergence and the latest advances in microbiome research.

I was fortunate to have developed in collaboration with Conor Feehily from the University of Glasgow and Robert Hirt from the University of Newcastle an exciting programme related to the important area of urogenital microbes in health and disease. Both experienced researchers and clinicians along with early career professionals presented engaging and important topics which led to active discussion.

The conference supported a flexible approach to the wide range of topics and activities available. Attendees could move between parallel sessions, choosing from:

- Prize lectures delivered by eminent microbiologists such as Richard Lenski and Lindsay Hall (these talks highlighted groundbreaking research and inspired lively discussion).
- Hot topics and flash talks consisting of short focused presentations on emerging issues, including global equity for women in microbiology, neurodiversity in research and innovative approaches to AMR.
- Workshops and professional development sessions on career advancement, publishing and building industry partnerships which provided practical guidance and networking opportunities.
- Poster sessions with around 530 posters.

The exhibition hall buzzed with conversation as presenters shared their latest findings and fielded questions from peers.

This conference was designed to foster connections. Coffee breaks, lunches and evening receptions offered informal settings for attendees to meet collaborators, mentors and friends. Social media played a significant role with the hashtag #Microbio25 trending as delegates shared highlights, photos and reflections in real time. The atmosphere was inclusive and supportive, with early-career researchers, established scientists and

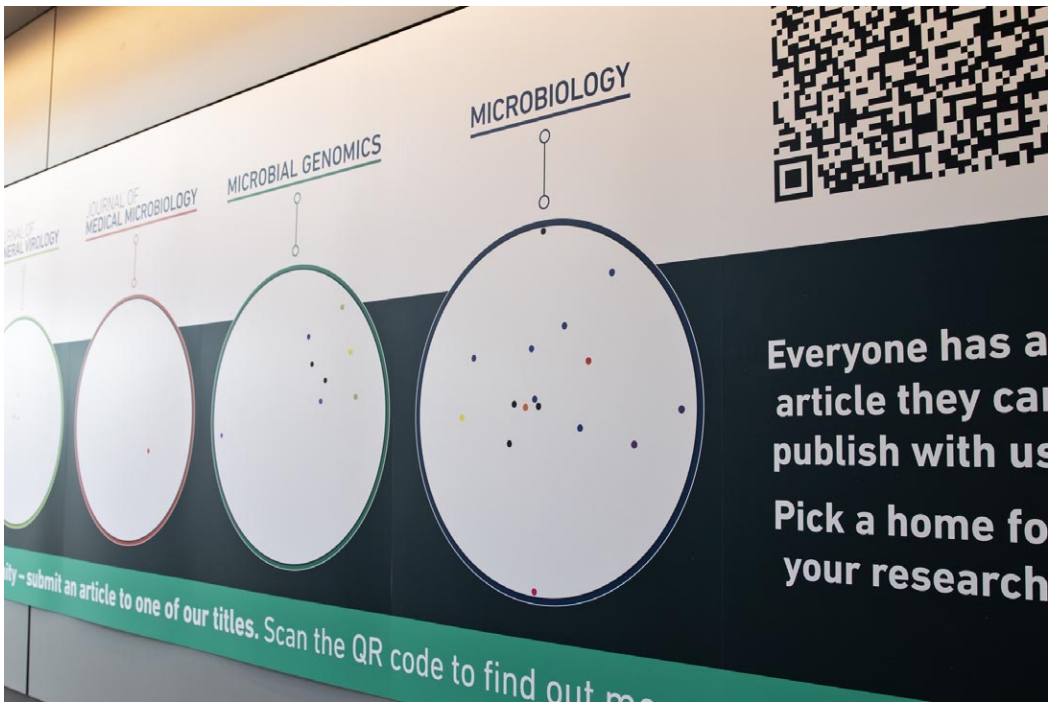
industry representatives all engaging as equals.

The exhibition hall was a hub of activity, featuring booths from leading scientific suppliers and biotech companies. Exhibitors showcased the latest in sequencing technology, lab equipment and research tools, often with interactive demonstrations and the all-important giveaways we all love, even a visit from the Easter Bunny added a playful touch to the proceedings. These interactions provided valuable insights into new products and fostered important collaborations between academia and industry.

A hallmark of the conference was its emphasis on equity, diversity and inclusion. Dedicated sessions addressed actionable strategies for empowering women in microbiology, supporting neurodiverse researchers, and increasing access to research opportunities for under-represented communities. The Society's commitment to creating a welcoming environment was evident in every aspect.

Several moments stood out, including the prize lectures. The talks by leading microbiologists, including the Black Microbiologists Association's EDI prize-winning lecture, were described as "fantastic and highly relevant", setting the intellectual tone for the event. The poster hall and the sheer volume and diversity of posters made for lively discussions, with some stands drawing crowds for their creative displays and engaging presenters.

Overall, the Microbiology Society Annual Conference 2025 was more than a series of lectures and posters, it was a celebration of scientific curiosity and community. Delegates left Liverpool with new knowledge, strengthened networks and a renewed sense of purpose. Early-career researchers gained valuable experience presenting their work and building confidence, while established scientists like myself were able to reconnect with colleagues and explore new collaborations.



HOW TO REQUEST A TEST: A CLINICIAN'S GUIDE TO THE INTERPRETATION AND EVALUATION OF MEDICAL TESTS

AZUL ZORZOLI

Clinical scientist, Department of Laboratory Medicine, Royal Infirmary of Edinburgh

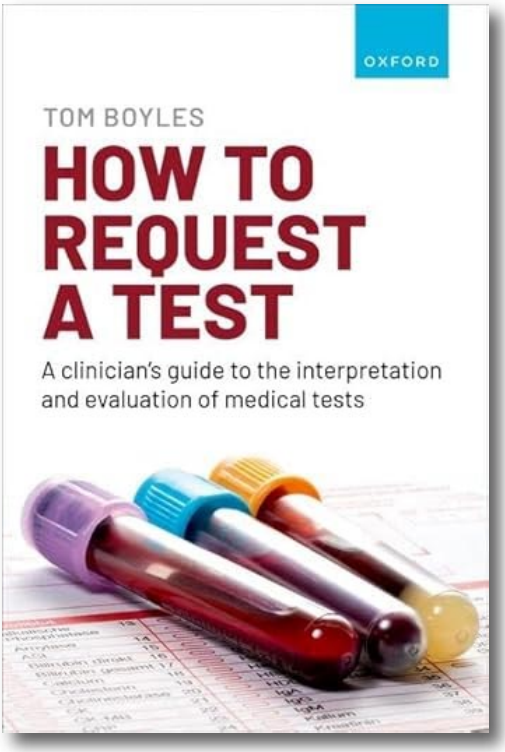
During my clinical scientist training, I shadowed a microbiologist who communicated results to the Intensive Care Unit (ICU) team. A test from one of their patients had just returned negative for *Pneumocystis jirovecii,* a rare fungus primarily affecting immunocompromised patients. The ICU team was puzzled about the result. "Can we trust this test? Should we send a new sample?", they asked. The PCR (Polymerase Chain Reaction) for *P. jirovecii* is highly sensitive and specific when performed on deep respiratory samples. Would commenting on the test's accuracy help to answer their questions?

The book H*ow to Request a Test* by Tom Boyles, an experienced infectious diseases doctor from South Africa, teaches how to interpret laboratory and imaging results by focusing on the clinical context. Although the target audience is junior doctors, the book is also particularly relevant for trainee clinical scientists seeking to review statistical concepts related to clinical interpretation.

Patient-centered testing

Boyles emphasises that prioritising the individual patient and their specific clinical context is the correct approach rather than focusing on a test's accuracy data. Thus, the ICU question could be rephrased as: "given the negative CSF PCR result, what is the likelihood that the patient still has the infection?" When framed this way, relying on sensitivity and specificity data would be insufficient. These parameters describe the test's performance in controlled populations with known disease status, not its ability to predict disease presence or absence in an individual patient in a specific clinical scenario.

In concise chapters, with a clear tone and a degree of gentle self-mockery, the author clarifies concepts, detailing the pros and cons of traditional statistics like



diagnostic accuracy, predictive value and likelihood ratios. The book also explains essential statistics for interpreting scientific journal data, including the Receiver Operating Characteristic (ROC) curves and Forest Plots used in meta-analysis.

Think before you test

Boyles uses real-life examples such as pregnancy tests and full blood counts to challenge the conventional testing approach. He also discusses 'diagnostic stewardship' even though he does not use that term. This concept gives a framework to help decide which tests should be requested and when and how to act upon results to avoid unnecessary testing, reduce patient risks and save healthcare resources.

Additionally, Boyles writes about decision thresholds concerning clinical practice. An example of a testing threshold occurs when doctors decide not to test for a condition if they consider it improbable for the patient. In contrast, a treatment threshold is reached when treatment is initiated without additional testing, for instance, when clinicians feel confident in their diagnosis and believe the benefits of treating outweigh the risks associated with unnecessary tests.

Limitations and advanced content

The final chapters address complex topics such as clinical trial design and include Boyles' improvement suggestions. These advanced sections appear more suited for established clinicians and scientists and may overwhelm less experienced readers. Despite that, they contain helpful definitions and valuable ideas that can help build a strong foundation in evidence-based medicine. Another limitation, albeit not severe, is the unavailability of the supplementary video links at the end of each chapter. Once the access is restored, they will serve as good additional learning resources, enhancing the overall quality of this book.

Who should read this book?

How to Request a Test serves as a concise guide designed to help navigate the complexities of diagnostic test interpretation. Readers – particularly those on a busy schedule – will gain confidence in requesting and interpreting tests while also strengthening their clinical reasoning skills. It is definitely worth a read.

Boyles T. *How to request a test: a clinician's guide to the interpretation and evaluation of medical tests.* Oxford: Oxford University Press; 2022. 128 pp.
ISBN: 978-0192866615

ECHOES OF AUTOMATION: A LOOK BACK AT 90S CLINICAL CHEMISTRY

BARBARA PETERS
Specialist anatomical pathology technologist

With many thanks to David Mason, Senior BMS, Southmead Hospital, Bristol for his help

For those of us who toiled in the clinical chemistry laboratories of the 1990s, the names of our analytical monsters evoke a certain nostalgia, perhaps tinged with a bit of technological amusement. The landscape of automated testing was a world away from the sleek, integrated systems we see today, filled with quirks, workarounds and the occasional dramatic incident.

One of the mainstays of our department at Southmead Hospital was the formidable Technicon SMAC – with computer! For those who joined the Southmead Hospital Lewis laboratory's team a little later, this predated the arrival of the Technicon (later Bayer) Dax. The Dax, however, needs no introduction to many, its hourly "BONG...BONG" serving as a rhythmic marker of the working day.

When speed was of the essence, the Technicon RAX-T was our go-to "urgents" analyser in the early part of the decade. Its eventual replacement, the Kodak, while a step forward in some respects, introduced its own set of challenges. Many will recall the necessity of applying a "fiddle factor" to several tests on the Kodak to ensure its results aligned with those produced by the trusty Dax. Such a practice, born of necessity and a desire for consistency, would undoubtedly raise eyebrows in today's rigorously controlled laboratory environment!

Beyond these primary workhorses, we also relied on a couple of smaller, more specialised analysers. The Monarch, primarily used for batch tests like fructosamine, remains a somewhat hazy memory for me now. In contrast, the MIRA – emphatically not related to showers! – holds a more vivid place in our recollections.

The MIRA was designated for "high-risk" samples, predominantly those flagged for HIV and hepatitis. The reason for this segregation was the rather enthusiastic tendency of the SMAC and Dax to

aerosolize serum during their sampling procedures. These “Ooh-nasties”, a term affectionately (and perhaps nervously) coined by our colleague Debs, demanded a more cautious approach. Processing these samples involved donning full personal protective equipment – gowns, masks, goggles and double gloves – and being confined to a small room at the back of the lab.

The main lab also housed a collection of essential, albeit less automated, equipment. The IL blood gas analyser provided crucial information about a patient’s respiratory and metabolic status. The osmometer precisely measured the concentration of dissolved particles in a solution. The IL Flame Photometer, a device that now seems almost archaic, presented a somewhat precarious method for determining sodium, potassium and lithium levels by introducing the sample into a flame and analysing the emitted light.

And of course, who could forget the Bilirubinometer? This wonderfully straightforward piece of kit determined bilirubin levels simply by assessing the colour intensity of the patient’s serum – a testament to the more visually-driven techniques of the past.

Beyond the routine hum of the analysers, there were also moments that punctuated the daily grind. I’m sure many will vividly recall the day a trunnion sheared in a centrifuge, resulting in a rather dramatic and unforgettable “bloodbath”. Such incidents served as stark reminders of the powerful forces at play within the laboratory and the importance of meticulous equipment maintenance.

Looking back, the clinical chemistry lab of the 1990s was a unique blend of emerging automation and hands-on techniques. While the technology may seem rudimentary by today’s standards, it was the backbone of diagnostic testing, and the memories of those “BONG...BONGs”, “fiddle factors” and the occasional laboratory drama remain etched in the minds of those who were there.

Bristol’s bold biochemists outside the Southmead Hospital laboratory

THE DIGGLE MICROBIOLOGY CHALLENGE

Question 47 from the April issue

Which of the following statements best describes the pathogenesis of measles virus infection?

A) The virus initially infects epithelial cells in the respiratory tract and then spreads to regional lymph nodes.

B) Measles virus primarily targets hepatocytes, causing systemic infection through the bloodstream.

C) The virus first infects alveolar macrophages or dendritic cells, followed by lymphoid tissue infection and systemic spread.

D) Measles virus enters the body through the gastrointestinal tract and spreads to the respiratory system.

E) The virus directly infects neurons, causing neurological symptoms before spreading to other organs.

Incorrect answers

A, B, D, and E are incorrect as they do not accurately describe the established pathogenesis of measles virus infection.

Explanation: The pathogenesis of measles virus infection follows a specific sequence of events:

- **Initial infection:**
  The measles virus first infects alveolar macrophages or dendritic cells in the respiratory tract. This occurs through the binding of the viral H protein to the signaling lymphocytic activation molecule (SLAM, also known as CD150) on the surface of target cells.
- **Local replication:**
  After initial infection, the virus replicates in tracheal and bronchial epithelial cells for two to four days.
- **Lymphoid tissue infection:**
  The virus then infects local lymphatic tissues, possibly carried by pulmonary macrophages.
- **Primary viremia:**
  This occurs two to three days after initial replication, leading to infection of regional and distal reticuloendothelial sites.
- **Secondary viremia:**
  A second viremia occurs five to seven days after initial infection, during which infected lymphocytes and dendritic cells migrate to the subepithelial cell layer and transmit the virus to epithelial cells.

- **Systemic spread:**
  The virus disseminates to various organs prior to the appearance of the characteristic rash.
- **Respiratory tract release:**
  Following amplification in the epithelia, the virus is released into the respiratory tract.

This process explains the highly contagious nature of measles and its systemic effects. The incubation period from exposure to prodromal symptoms averages 10-12 days, with rash onset occurring around 14 days post-exposure.

These questions, set by Mathew Diggle, are designed with trainees in mind and will help with preparation for the microbiology part 1 FRCPath exam.

Question 48

A seven-year-old child presents with acute respiratory distress and limb weakness during a suspected summer outbreak. Considering Enterovirus D68 (EV-D68), which laboratory investigation is most appropriate for rapid confirmation?

Options:

1) Viral culture on rhabdomyosarcoma cells incubated at 33°C.
2) Serology for EV-D68-specific IgM antibodies.
3) Broad-range enterovirus/rhinovirus RT-PCR on nasopharyngeal swab.
4) EV-D68-specific RT-PCR targeting VP1 or VP4-2 regions.

The answer to this question will appear in the next issue of LabMed News.

DEACON'S CHALLENGE REVISITED

NO 37. ANSWER

Question 37

Calculate the least significant difference for a change in cholesterol if the intra-individual coefficient of variation for cholesterol is 4.7% and the analytical coefficient of variation, 2.4%. A patient was changed from Atorvastatin 80 mg to Rosuvastatin 40 mg and the total cholesterol fell from 6.9 to 5.9 mmol/L.

Calculate the percentage change in cholesterol and state whether this is significant.

First calculate the total coefficient of variation.

$CV_t^2 = CV_a^2 + CV_i^2$

Where CV_t = total coefficient of variation = ?

CV_a = analytical coefficient of variation = 2.4%

CV_i = intra-individual coefficient of variation = 4.7%

So that $CV_t^2 = 2.4^2 + 4.7^2$

$= 5.76 + 22.09 = 27.85$

and $CV_t = \sqrt{27.85} = 5.2\,\%$

For two results to be significantly different (at $p<0.05$) they have to be at least 2.8 SDs apart. *(The derivation of this can be found on p 105 of Clinical Investigation and Statistics in Laboratory Medicine by Richard Jones and Brian Payne, Venture Publications 1997).*

Similarly, if a result is expressed as a percentage change from the initial value, then this percentage change has to be greater than 2.8 CVs to be significant.

Therefore the least significant difference is $2.8 \times CV_t\,(\%) = 2.8 \times 5.28 =$ **14.8%**

$$\text{Percentage change} = \frac{\{\text{Initial chol (mmol/L)} - \text{Final chol (mmol/L)}\} \times 100}{\text{Initial chol (mmol/L)}}$$

$$= \frac{(6.9 - 5.9) \times 100}{6.9} = \textbf{14.5\%}$$

Since this percentage change is not greater than 14.8%, the change is **not** quite statistically significant at the 5% level of probability.

See opposite page for the next question....

Question 38

A 45-year old man is brought to Accident and Emergency following a seizure. He had been working alone late in a garage when a security guard found him and called an ambulance. On admission, he has a large bruise on the left temple, is semi-comatose and smells of alcohol. The admitting team request urea and electrolytes, glucose and an alcohol and blood gas estimation and arrange an urgent CT scan. The results are as follows:

Sodium	141 mmol/L	Potassium	4.5 mmol/L
Urea	3.5 mmol/l	Creatinine	105 µmol/L
Ethanol	2,700 mg/L	Glucose	3.2 mmol/L
Hydrogen ion	39 nmol/L	pO_2	11.6 kPa
pCO_2	3.8 kPa		

The CT scan does not show any bony injury or evidence of intracranial bleed.
The neurological registrar is called and asks for an osmolal gap to help provide a quick estimation of whether there is a possibility that other toxic substances present in the garage, such as antifreeze, have been taken in any quantity.

The measured osmolality is 330 mOsm/Kg.

As duty biochemist, you are asked to:

a) Calculate the osmolal gap

b) Show whether the alcohol concentration explains the observed osmolal gap, explaining any assumptions you make in the process.

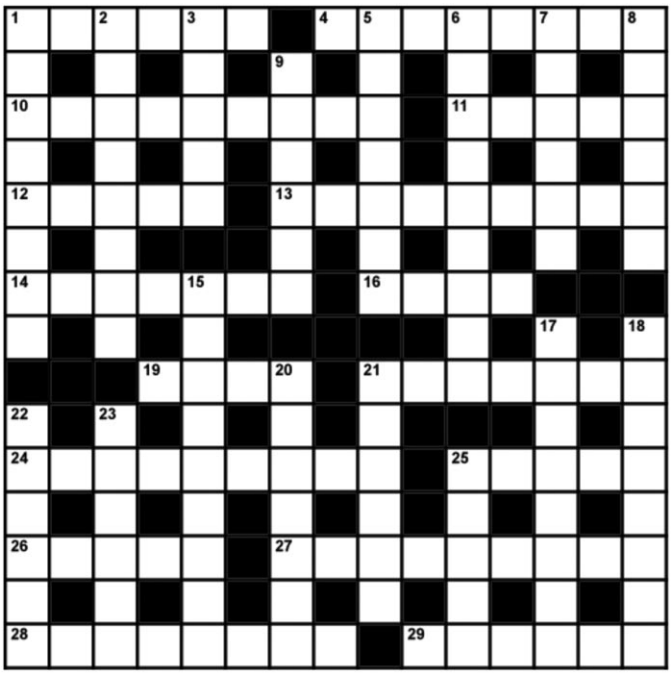
THE CROSSWORD BY RUGOSA

Across

1 Discharge test results (6)
4 Care a bit about aetiology of some diseases (8)
10 Old lab ode dealt with test for poisoning (5,4)
11 Enliven a solemn occasion? (5)
12 Pilot ends back on the streets (5)
13 'Digestive structures' review essay looms but no article (9)
14 Skin test: ordered unknown amount (7)
16 Some have gone on ahead for gas (4)
19 Bird nesting in an hibiscus bush (4)
21 Pair of girls showing a bit of leg (7)
24 Able to destroy infectious agents resulting from civil raid disruption (9)
25 First priest reaffirmed our opportunity for confirmation (5)
26 A talk about an SI unit (5)
27 Electronic equipment: if in peril, deploy following morning (9)
28 Group of symptoms and signs – one my doctor's briefly interpreted (8)
29 Detain US probationer (6)

Down

1 More about aberrant computer boot software revealing site of protein synthesis (8)
2 Inaccurate pointers to cell components (8)
3 Clause for one using 6? (5)
5 19th-century English physician is featured in supplement (7)
6 See proscribed unreliable paternosters as conveyance (9)
7 Spheres concerning charitable donations (6)
8 A flirt relaxing? (2,4)
9 Touching wire? It's instinctive (6)
15 Description of appearance resulting from rub with car oil preparation (9)
17 Extract end product from synthesis for dilute salt (8)
18 Rat poison: endless battle at home (8)
20 Misread presentation of weapon (7)
21 Sloppy mistreatment for potentially precancerous lesions (6)
22 Brings to mind repeals less radical (6)
23 Rutherford's particle set right on top (6)
25 Monk prematurely finished by new infectious agent (5)



SOLUTION FOR APRIL'S CROSSWORD

SUDOKU ... THIS MONTH'S PUZZLE

		R	Y				M	
		I		E			Y	
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	T	M			E			
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	S				H	C		

SOLUTION FOR APRIL

B	A	C	T	E	R	I	U	M
R	I	M	C	U	B	A	E	T
E	U	T	A	I	M	R	B	C
I	M	E	U	A	C	T	R	B
C	B	R	M	T	E	U	A	I
A	T	U	R	B	I	M	C	E
U	C	A	E	M	T	B	I	R
T	E	B	I	R	A	C	M	U
M	R	I	B	C	U	E	T	A

OBITUARY

WILLIAM (BILL) FRASER

1955-2025

Professor William "Bill" Fraser died following a short battle with cancer on 2 April 2025 in Norwich. He was 69 years old. His retirement, just last year, meant that the bone and mineral research field had lost one of its most respected scientists and clinicians. Bill made major research contributions in our understanding of vitamin D, parathyroid hormone (PTH) and calcium metabolism, and bone biology. He conducted ground-breaking clinical trials investigating new therapies for metabolic bone disease including osteoporosis, Paget's disease of bone, hypo- and hyper-parathyroidism and vitamin D metabolism. Bill developed several new immunoassays and mass spectrometry techniques; some have become established diagnostic tools in healthcare pathology services. Most significant of all, Bill exemplified how to do it right – how to be an effective and inspiring research leader, doctor, colleague and teacher. He had a highly unique brand of incisiveness, a brilliant mind, quick wit and an endless generosity with his time. This set of qualities represents a very rare legacy.

Bill was born and educated in Glasgow, Scotland. He attended the independent Allan Glen's School (now the site of City of Glasgow College) in the 1960s. Rather than pursuing his father, Brian, into the world of electronics (Brian Fraser was notably involved in the development of ultrasound), Bill graduated from The University of Glasgow with a BSc (Hons) in Biochemistry in 1977. He obtained his MBChB medical degree in 1982, winning the Robert Forbes Buchanan McKail Prize in Psychiatry. While at The University of Glasgow, he was also awarded a Marcella Doran Scholarship. During his student years, Bill was a keen rugby player (a passion he maintained all his life, especially for the Scottish national team). He also met his future wife Aileen when he was at university.

Following his undergraduate studies, Bill trained in Glasgow's teaching hospitals acquiring his MD (Hons), MRCPath (now FRCPath) and MRCP (now FRCP),

where his original clinical and research interests centred on the thyroid. In 1990, Bill obtained a locum consultant position with a travelling fellowship, which took him and Aileen to Saskatchewan in Canada. He returned to the UK to take up the joint positions of head of the Metabolic Bone Disease Unit at the Royal Liverpool University Hospital and senior lecturer in Chemical Pathology at the University of Liverpool.

Bill joined Alan Shenkin in the newly established academic Department of Clinical Chemistry at University of Liverpool and the Royal Liverpool University Hospital in 1991. His major activity was to develop a research programme in metabolic bone disease. He quickly made his mark, validating new assays for bone-related hormones, bone metabolites and vitamin D. He also took full advantage of the availability of the adjacent metabolic ward, which was the responsibility of the NHS Department of Clinical Biochemistry. This provided the opportunity to introduce new therapies for osteoporosis and Paget's disease. This was a fruitful area of research leading to an outstanding publication record, and he was widely approached to collaborate in research projects both nationally and internationally.

In addition to his clinical chemistry research, Bill collaborated extensively with the Human Bone Cell Research Group in Liverpool and contributed to seminal publications on the role of PTHrP, purinoreceptors and incretins in basic bone physiology and pathology.

He had an outstanding knowledge and understanding of clinical biochemistry and was an excellent teacher. His amusing and engaging communication skills meant that his presentations, locally, nationally and internationally were outstanding. He was a forceful and stimulating colleague to all in the department, contributing substantially to its development into one of the most technically advanced and clinically active departments in the UK. Bill remained in Liverpool for twenty years where he became internationally renowned, becoming professor in 2001.

He acted as a medical advisor to the Royal Osteoporosis Society and Parathyroid UK. He was a member of the National Institute for Health and Care Excellence (NICE) Panel for reviewing osteoporosis treatments. Bill sat on the editorial boards of several scientific journals. He became a director for the Supra-Regional Assay Service (SAS), a UK-based service for the analysis and clinical interpretation of specialised diagnostic tests. He was chairman for the UK NEQAS Specialist Advisory Group for Bone Markers; he was awarded the ACB Laboratory Medicine Foundation Award in 2006 and he presented the John Ireland Lecture. Bill received patient referrals nationally and from Europe for specialist investigation and treatment. Regulatory inspections and independent reports on Bill's research and clinical services often stated, *"one of the best units nationally"*. A Clinical Pathology Accreditation report in 2008 declared Bill's service as the *"highest ranked service provision"*.

In 2011, Bill relocated to Norwich Medical School at the University of East Anglia, UK, where he remained for the rest of his career. He became an honorary consultant in Metabolic Medicine at the Norfolk and Norwich University Hospital. He was a senior examiner for the Royal College of Pathologists. He was a member of the Endocrinology and Immunoassay Scientific Advisory Group. Under Bill's leadership, Norwich was awarded Paget's Association Centre of Excellence in 2016. Alongside these roles and his vibrant and award-winning research (including the Society for Endocrinology Prize for Best Paper), patient clinics, globally invited lectures (including India) and attendance at international conferences (Bill was an avid

Bill with one of his last PhD students, Nicole Ball, on Graduation Day, 2023

supporter of The American Society for Bone and Mineral Research (ASBMR) meetings and often presented and took part in lively debate), he supervised multiple PhD students, mentored junior clinical colleagues, taught on the MBBS medical degree and became the Dean of Norwich Medical School in 2018, subsequently guiding the school through the COVID-19 pandemic where he also developed new immunoassays for detecting SARS-CoV-2 variants. In 2024, Bill finally took his rightful retirement, where he planned to "play the golf courses of the world".

Over a career that spanned 42 years, Bill and his teams developed new and novel assays for clinical diagnostic use in the NHS, developed and refined treatments for metabolic bone disease, and expanded basic research into bone and cancer biology. Bill authored more than 650 research papers, four book chapters and is a named co-inventor on seven patents. His laboratory research interests were in biochemical endocrinology and the development and application of immunoassays and mass spectrometry techniques, particularly in relation to calcium homeostasis.
This research has led to significant improvements in patient care and experience. Development of innovative assays for vitamin D measurement have facilitated accurate investigation of the role of vitamin D in several disease states, establishing the marked difference in vitamin D status in individuals throughout the UK and reassessment of the need for vitamin D supplementation plus optimisation of vitamin D supplementation regimes around the world.

Bill's clinical research interests centred around metabolic bone disease, particularly osteoporosis, Paget's disease of bone and vitamin D metabolism. He set up several studies investigating the aetiology of bone disease, the role of hormones, diet and exercise in the control of bone turnover. Bill was involved in the assessment of multiple new treatments; for example, bisphosphonates, PTH, vitamin D and its analogues, selective oestrogen receptor modulators (SERMS), cathepsin K inhibitors and sclerostin antibodies. Studies of bisphosphonates in Paget's disease produced the evidence base that intensive therapy is of no greater benefit than symptomatic treatment. This discovery had major financial implications for the NHS in treating Paget's disease and to the patients who were receiving unnecessary medication with associated side effects. Information obtained from this study led to the hypothesis that genetic testing (e.g. SQSTM1 mutations) and early treatment of susceptible individuals was a therapeutic possibility. Research into the role of PTH and its anabolic effects on bone established the important interaction with growth hormone (GH) and the therapeutic and financial potential of phosphate supplementation manipulating the PTH circadian rhythm. This research significantly impacted osteoporosis and

GH deficiency treatment and also translated into paediatric practice. Bill's long-term collaborations with Nottingham Trent University, Liverpool John Moores University and Loughborough University have provided an important database on the role of exercise, diet and vitamin D in athletic performance, sport related bone injuries and professional sport outcomes.

Bill was a longstanding collaborator with UK Ministry of Defence human sciences research projects. These projects investigated the aetiology of musculoskeletal injuries, vitamin D status and health and, most recently, sex-specific health issues to inform the ministerial Women in Ground Close Combat Review. His research into stress fractures with the Army Research Training Division provided the evidence base for the causation of stress fractures and the possible role of vitamin D, smoking and the nature of the training programme in the development of injuries. His contributions to evidence-based policies for improving the health of military personnel is deemed unprecedented.

Bill exhibited his accomplished leadership through his strategic and administrative roles. He was responsible for appraisals, review and co-ordination of the activities of several different groups. He achieved these tasks admirably with a principled approach and a balanced blend of motivation, direction, generosity of time and with a superb depth of medical and scientific knowledge and understanding.

Bill in his research lab, the Bioanalytical Facility, at Norwich Medical School, University of East Anglia, UK, in 2020

He set others extremely high standards and expectations and displayed leadership by example. He tirelessly gave encouragement and support to developing medical students, doctors, scientists and technicians alike, with a *"my door is always open, even when it's closed"* invitation. He was adored by his patients, who travelled from far to see him, and who he always had time for, and regularly managed challenging patients who had exhausted other medical treatment options. He supervised multiple postgraduate research programmes, remembering every single detail of his students' protocols and reviewing late into the night to make their deadlines. He supported and ran research programmes that would not necessarily gain him notoriety but were essential to unlock a stalemate in medical progress. These all came at a personal time cost to him, but his passion never waned. He still found time to support the charities who helped his patients; he sat on the Board of Trustees for the Paget's Association and Action Arthritis Norfolk, fundraising, raising awareness, advocating and sitting on their various committees. He cycled from Land's End to John O'Groats to raise money for the Royal Osteoporosis Society.

For such a hard-working and productive researcher and clinician, one might think that Bill had little time for anything else. This was very far from the truth! Bill played golf, "squeezed tunes" out of the violin, mandolin and guitar, and loved to tinker with motor cars and classic motor bikes. He played badminton with his students and completed RideLondon in 2017, cycling 100 miles to raise money for the Paget's Association, even getting off his bike at one stage to perform CPR on a fellow rider in trouble, before setting off again once an ambulance had arrived! Becoming a grandfather for the first time in recent years also gave him great and obvious pride and joy outside of his work.

Talking to Bill was always life-affirming. He was funny, warm, irreverent and full of first-class academic gossip, though on occasion the *"I'm not telling you"* in his

Storytelling, anecdotes and joking, 2019. Left to right: Bill, John Dutton, Jim Speakman, Chris Washbourne, Katharine Eastman, Nicole Ball, Charlotte Coombs, Jon Tang, Julie Grieves and Tom O'Leary

The ACB Golf Society had a series of challenge matches against their Dutch colleagues from NVKC, happily the ACB won three matches in a row and hence retained the trophy: The Golden Clog! Bill, as team captain, received the Golden Clog from the Dutch Captain, Hans Janssen.

characteristically strong Glaswegian accent – followed by a pulled face – was somewhat vexing! To have received his mentorship and friendship is a prized and wonderful thing. One would be forgiven for thinking that in the run-up to retirement, after such tremendous lifetime achievement, Bill (as many others do) might have reduced his industriousness, but right until and including his last working day, his insights, plans and visions were as cogent and sharp as ever. Our thoughts and condolences are with his wife Aileen, his children Helen, Karen and Brian and his grandchildren Isobel, Piper and Lily.

It's still a huge shock and we are so sorry that his retirement was cut too short – Bill was greatly admired and a really lovely man. We will always have the fondest memories of his compelling storytelling and anecdotes. He was a talented, loyal genius who lived his life to the full and always with humour, wine and the most rigorous science. It was a rare privilege to have known him and we will miss him forever.

- **Jointly written by Bill's colleagues from Norfolk and Norwich University Hospitals and Liverpool Clinical Laboratories**

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