

LabMedNews



Association for
Laboratory
Medicine



OCTOBER 2025

- LabMed joins IBMS and RCPATH in supporting independent review
- The UK's link to European and global laboratory medicine
- National Pathology Week 2025
- LabMed Equity, Diversity and Inclusion
- Meet the new LabMed workforce leads
- The power of testing: making the case for diagnostics
- Tips on rising to the challenge of being a trainee and a first-time training officer
- UK Standards for Microbiology Investigations (UK SMIs)

Optimise Your Flow Cytometry



CD-Chex® Plus

Comprehensive control with 30 parameters including dual CD4+ levels, CD34+ and TBNK cell enumeration.



CD-Chex® CD34

Three-level control for CD34+ stem cell enumeration.



Rare Marker Controls

CD-Chex TdT Plus®, CD-Chex CD103 Plus®, CD-Chex CD117® Plus. Designed for leukaemia and lymphoma panels.*



Find out more at:
alphalabs.co.uk/flow-cytometry



Cyto-Chex® BCT

Direct-draw blood collection tube that maintains cellular morphology and antigen expression, ideal for extended flow cytometry analysis and transport.



Find out more at:
alphalabs.co.uk/cyto-chex



Streck Cell Preservative®

Liquid stabiliser that maintains white blood cell integrity and CD marker expression for batching and flexible sample processing.

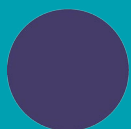


Find out more at:
alphalabs.co.uk/cell-preservative

CONTENTS

OCTOBER 2025

Message from the president	page 4
LabMed news	page 6
Corporate news	page 20
LabMedUK26	page 21
Trainees' news	page 22
Microbiology news	page 24
Meeting reports	page 28
Obituary	page 32
Diggle's microbiology challenge	page 34
Deacon's challenge revisited	page 36
Sussex challenges	page 37
Crossword and sudoku	page 39



Association for
**Laboratory
Medicine**

LabMed News ISSN 3033-3814
© Association for Laboratory Medicine 2025

MESSAGE FROM THE PRESIDENT

This is my first piece for *LabMed News* since taking over the president's role at LabMedUK in Manchester. I would like to thank you all for the kind messages of welcome I have received. Continuing Kath's hard work will be a tough job to follow, but I'm really pleased she's continuing in the role of past-president for the next year.

In response to the NHS England 10-year plan and the previously published plans of the devolved nations, we noted that a number of aspects of these plans align with the Association's strategy for 2025-29, which has now been finalised and made available to members. Following on from this, Victoria and I have, to date, met with three of the four National CSO/Healthcare Science leads to introduce our LabMed strategy to them.

Members will have noticed a new president's update email newsletter issued for the first time in September. I would appreciate feedback on how this has been received. The aim of this newsletter was to collate the calls for information and volunteers which frequently come into the president's email inbox. This is in addition to *LabMed News* and should allow us to keep members informed without the need for multiple emails. A regular call is from the EFLM and IFCC for nominations for their standing committees, and I'm keen that LabMed takes a more visible role in the work of these organisations. Please get in touch with the office team if you see anything you'd be interested in applying for, and we, as an organisation, can look at supporting your application. Further information can be found on [page 8](#).

From a meetings viewpoint, the LabMed Leadership Summit took place at the end of September in conjunction with the IBMS Congress in Birmingham, and once again proved to be a popular event covering topics at the cutting edge of laboratory management. We are also hosting two key events in November in London on consecutive days at the Royal College of Pathologists which we hope members will consider attending. The first is a training day hosted by the Trainees' Committee. This will be free for members to attend and will include the Flynn Award lecture, which I'm really pleased to say will be delivered by Gwen Wark. On the following day, the National Audit Committee will be hosting their annual meeting, which I'm sure will once again prove popular. I look forward to seeing you there.



IAN GODBER

President

THE ONLY WAY TO BE SURE IS RANDOX QC

For over 40 years, Randox has set the standard in diagnostic quality control and external quality assessment globally. The trusted partner of over 100,000 laboratories worldwide, delivering reliable quality control solutions that safeguard patient results and laboratory reputations.

**40 YEARS IN CLINICAL
DIAGNOSTICS**

Experience you can trust

**3RD LARGEST QC
MANUFACTURER GLOBALLY**

Proven capacity & innovation

**MARKET LEADING
EXPERTISE**In commutability, stability, &
clinically relevant controls**#1 IN EXTERNAL QUALITY
ASSESSMENT (RIQAS)**The world's largest international
EQA scheme

**With Randox, every result inspires confidence.
Because accuracy saves lives.**

LABMED JOINS IBMS AND RCPATH IN SUPPORTING INDEPENDENT REVIEW OF UK PATHOLOGY SERVICES

Ensuring member voices shape the future of pathology

The Institute of Biomedical Science (IBMS), with support from the Royal College of Pathologists (RCPATH) and the Association for Laboratory Medicine (LabMed), has commissioned Lord Patrick Carter of Coles to lead a new independent review of pathology services across the UK. This initiative – informally referred to as Carter IV – aims to provide a comprehensive, evidence-based assessment of current services and workforce capacity to inform future decisions.

The review is funded by IBMS and will be conducted by Lord Carter and his team. LabMed will actively engage in the review to ensure that the perspectives and experiences of our members are fully represented. While previous Carter reports have often focused on efficiency and cost-saving, we are committed to ensuring this review reflects the full value of pathology – including quality, clinical impact, workforce development and the broader contribution to patient care.

Crucially, we believe the review must also recognise the direct clinical impact of pathology services on patient pathways and the added value and improved quality this brings. Pathology input underpins diagnosis, treatment decisions, disease monitoring and prevention, making it an essential part of safe and effective patient care. Highlighting this contribution will ensure the review captures the true value of pathology beyond operational metrics.

The review will assess service configuration, workforce skills and capacity, digital readiness, and include some benchmarking across England, Northern Ireland, Scotland and Wales as well as internationally. It is expected to report in early 2026.

We recognise that the process is not without limitations, including a tight timeline and concerns about data quality and consistency. LabMed members can help highlight variability across networks, the unique services provided by specialist referral laboratories, and also advocate for a balanced approach that values quality and sustainability as much as productivity.

We hope the final report will serve as a powerful lobbying tool to influence policy, secure investment and safeguard the future of pathology services. By contributing to a robust evidence base, we aim to ensure that decisions made by governments and healthcare leaders are informed by the realities of our profession.

We will share more details as the review progresses and invite members to contribute their views and experiences.



Association for
**Laboratory
Medicine**



The Royal College of Pathologists
Pathology: the science behind the cure



GastroPanel®

Rethinking gastroscopy referrals to improve case-selection



Detects atrophic gastritis
before endoscopy

Prioritise referrals according to clinical need



Streamlined diagnostic pathway

Early detection and diagnosis for timely
intervention



Simple, non-invasive blood test

Available as a lab service or point-of-care
test for clinics

**SCAN TO
LEARN MORE**



BIOHIT
Innovating for Health

+44 151 550 4 550
info@biohithealthcare.co.uk
biohithealthcare.co.uk

LABMED: THE UK'S LINK TO EUROPEAN AND GLOBAL LABORATORY MEDICINE

The Association for Laboratory Medicine (LabMed) is the UK's recognised national society for laboratory medicine and the country's full member of both the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) and the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM). Crucially, this means that the only way UK professionals can participate in IFCC and EFLM activities is by being a member of LabMed.

Our members gain access to a wealth of international opportunities: joining IFCC or EFLM committees and working groups, attending global and European congresses, contributing to the development of international guidelines and registering as a European Specialist in Laboratory Medicine (EuSpLM). LabMed membership ensures that the UK's voice is heard in the scientific, educational and policy work that shapes the future of laboratory medicine.

The IFCC provides global leadership, advancing excellence in science, education and professional standards across more than 100 member countries. The EFLM, as IFCC's European regional federation, focuses on harmonising training, accreditation, quality systems and professional recognition across Europe. Together, these organisations set the framework for how laboratory medicine develops internationally.

By representing the UK within both IFCC and EFLM, LabMed acts as the country's single authoritative voice – since only one national society per country can hold full membership. This ensures that the UK is fully involved in global and European decision-making and that UK professionals benefit directly from the standards, resources and networks that these federations provide.

For anyone in the UK wishing to engage in IFCC or EFLM activities, we will publish all opportunities within the monthly president's newsletter and on our [Get involved](#) webpage.

CONDOLENCES

LabMed joins colleagues at BIVDA and across the diagnostics community in mourning the death of Helen Tucker. As chair of BIVDA from 2022–2025, Helen worked closely with partner organisations including LabMed, championing the role of *in vitro* diagnostics in improving patient care and supporting a strong, innovative industry. Her leadership helped drive forward important collaborations and strategic developments that continue to benefit both professionals and patients. Her absence will be deeply felt and we extend our heartfelt condolences to her family, friends and colleagues.



NATIONAL PATHOLOGY WEEK 2025

We will take part in National Pathology Week (NPW) 2025, which runs from 3-9 November. This annual celebration, led by the Royal College of Pathologists (RCPATH), showcases the vital role of pathology in patient care. The 2025 theme, 'Pathology Solutions', will shine a spotlight on innovation, new ideas and the ways pathology helps transform prevention, diagnosis and treatment.

As a member of the Pathology Alliance, LabMed will be supporting two key events during the week.

On 4 November, the RCPATH will host a high-profile event at the House of Commons, sponsored by Simon Opher MP. Titled 'Pathology Solutions', this invitation-only gathering will bring together parliamentarians and healthcare stakeholders to highlight the pivotal role pathology plays across the NHS. Discussions will focus on how pathology services are driving forward the NHS 10-year health plan and supporting the delivery of high-quality, patient-centred care. Our president Ian Godber, past-president Kath Hayden and chief executive Victoria Logan will attend.

The celebrations continue on 5 November at 6pm GMT with the Pathology Alliance online event: '[Pathology Solutions: how tests help patients](#)'. This interactive session will explore how a wide range of diagnostic tests support patient care. From everyday tests such as the Full Blood Count to more advanced techniques like multiplex PCR tests for respiratory infections, speakers from different specialties will share short, accessible talks.

Chaired by Suzy Lishman CBE, the event is open to all but will be particularly relevant to undergraduates and senior school students interested in healthcare careers.

Through these events, LabMed and its partners aim to highlight the crucial contributions of pathology to healthcare – and to inspire the next generation of laboratory professionals.

Find out more and book your place for the Pathology Alliance online event here:

[Pathology Alliance Online](#)

LABMED EQUITY, DIVERSITY AND INCLUSION

The Association for Laboratory Medicine (LabMed) is an inclusive organisation committed to fostering a culture where individual differences are welcomed, diversity is valued, equity is promoted and discrimination is actively challenged. Our aim is that all members, employees and stakeholders feel respected, engaged, able to contribute their best and that our community reflects the breadth of the society we serve.

We comply with the Equality Act 2010 and other relevant legislation, ensuring fairness and equity for all members, employees, stakeholders and applicants. We do not discriminate on the grounds of race, ethnicity, national origin, religion or belief, sex, sexual orientation, gender identity, disability, age, marriage or civil partnership, pregnancy, maternity or paternity. We oppose all forms of unlawful or unfair discrimination.

The Equity, Diversity and Inclusion (EDI) Progression Framework is a self-assessment tool developed by the Science Council and the Royal Academy of Engineering. It helps professional bodies evaluate and improve their EDI practices across ten key areas of organisational activity. The purpose of the framework is to help support strategic planning and continuous improvement in EDI and to encourage sector-wide learning and collaboration. The Science Council has just published the latest (third) LabMed EDI progress report and this will now inform a new work plan for the LabMed EDI workgroup.

The LabMed EDI workgroup held a very positive meeting last month with input from the newly established regional committee EDI liaison roles. Several new members were welcomed, including Inesa Iefimova (recently elected to LabMed Council), Chris Pitt (EDI liaison for Scotland), Sofia Koussis (EDI liaison for the North West), and Karen Smith-Baker (representing Immunology). The group discussed the different roles/organisational structure of EDI at LabMed and reviewed the Science Council Diversity and Inclusion Progression Framework 2025. Discussions covered the importance of working both locally and nationally and the challenges of gathering comprehensive data.



SOFIA KOUSSIS

Trainee Clinical Scientist,
Biochemistry; EDI Liaison,
LabMed North West Committee



CHRISTOPHER PITT

Biochemist, NHS Ayrshire & Arran

The group also agreed to shift terminology from “equality” to “equity” better to reflect recognition of different starting points and needs rather than equality of opportunity.

To facilitate regional EDI work, the EDI Liaison role was recently introduced within regional committees. The role of an EDI Liaison is to act as a connection and voice between the region’s members and executives, with the support of the national EDI champions. EDI regional liaisons support open and transparent discussions around accessibility and representation.

Additionally, they seek EDI input from members, hoping to create psychologically safe opportunities to share feedback. The North West region has launched an anonymous survey to collect demographic data, feedback and concerns. The survey aims to capture what EDI means to members whilst also mapping the diversity within the region. It is hoped that the survey will then be launched nationally. The insights gathered will help shape future LabMed initiatives in conjunction with the Science Council benchmarking report.

LabTestsOnlineUK

JOIN THE LAB TESTS ONLINE UK EDITORIAL TEAM

Use your expertise to improve patient access to clear, trustworthy information about lab tests. We’re looking for reviewers who are:

- Biomedical scientists who hold Higher Specialist Diploma (HSD)
- Full FRCPath clinical scientists and chemical pathologists
- Members of LabMed or RCPATH, or fellows of IBMS

HELP PATIENTS UNDERSTAND THEIR LAB TESTS

As a reviewer for Lab Tests Online UK, you’ll use your clinical expertise to make a national impact by helping patients better understand their test results.

Flexible – review at your own pace (four-week turnaround)

Rewarding – earn CPD credits

Valued – play a vital role in patient-centred care

Simple – no editing experience needed just your clinical insight

Join us today: enquiries@labmed.org.uk



AN UPDATE FROM THE LABMED SCOTLAND COMMITTEE

Au revoir to Karen Smith, outgoing chair

A huge thank you to LabMed Scotland's outgoing chair Karen Smith, who retired as consultant clinical scientist from the NHS Greater Glasgow and Clyde (GGC) after a long and distinguished service. She joined our Association in 1990 and has held numerous roles over the years, including member of the FCS Executive, member, then chair of the Trainees' Committee and regional tutor (Scotland).

Exciting changes to the Scotland Committee

Seshadri Vasan (NHS Grampian), who goes by his surname, was elected as the new chair of LabMed Scotland. He was previously secretary, a post now filled by Donna Chantler (NHS GGC). Emma-Louise Reed (NHS Grampian) is our new treasurer. Melissa McNaughton is away on maternity leave so Angela Burns (NHS GGC) has stepped up to the role of meeting's secretary.

Jenny Nobes (NHS Tayside) and Hannah Worthington (GGC) have been elected as the trainees' representatives for East and West, respectively, replacing Helen Wise (NHS Lothian) and Courtney Watt (GGC).

Frances Henriquez (GGC) has taken over from Lauren Hennessy (GGC) as immunology representative, while Karen Mitchell (NHS Grampian) has come on board as the representative for Grampian & Highlands.



Angela Burns in the virtual meeting hot seat

Christopher Pitt (NHS Ayrshire & Arran) has kindly taken on multiple roles as the liaison for both EDI and Sustainability in addition to continuing as the representative for Ayrshire & Arran, Dumfries & Galloway and Lanarkshire. He also supports Joy Johnstone (NHS Fife) with the *Scotland Newsletter*.

Finally, following Ian Godber's elevation as our president, Iain Jones now represents the RCPATH.

Spring Meeting

LabMed Scotland organised its Spring Meeting online on 19 March 2025, coinciding with its AGM. Chaired by Angela Burns, there were exciting presentations on iLFT and iDiabetes by Ellie Dow, Damien Leith and Jenny Nobes, our colleagues from NHS Tayside and the University of Dundee. Our incoming chair Vasan presented his work on AI/ML to prepare for future Disease-X pandemics, while Kamaljit Chatha spoke on the complex pathway to AI implementation in the NHS from her experience at the University Hospitals Coventry and Warwickshire.

Welcome to Vasan, our new chair

Seshadri Vasan is director of R&D and deputy Caldicott Guardian at NHS Grampian. He is also the inaugural director of the Grampian Commercial Research Delivery Centre, one of 21 such centres across the UK, and professor of medical and health sciences at the Edith Cowan University, Australia.

Previously, he led Australia's preclinical response as COVID-19 science leader for the national science agency and was awarded its highest Chairman's Medal 2020. For his Disease-X research, he won the Triennial Travel Medicine Research Fellowship Award 2024-2027 from the Royal College of Physicians and Surgeons of Glasgow (RCPSG).

He is a fellow of the Australian Society for Microbiology (and chair of the Virology



Seshadri Vasan

Special Interest Group), a fellow of the Royal College of Pathologists (and UK Standards for Microbiology Investigations Steering Group member), and a fellow of the RCPSG (and chair of Sustainability Steering Group). He is also a European specialist in laboratory medicine and obtained his MPH from Manchester and doctorate from Oxford on a Rhodes scholarship.

Vasan is a Community Health Index Management Board member, InnoScot Health non-executive director, Moderna Respiratory Portfolio Advisory Board member, NHS Research Scotland Management Board member, Opportunity North East Life Sciences Board member, Precision Medicine Scotland Board member, and Scotland's Public Benefit and Privacy Panel member.

Dr Vasan is the national officer (Microbiologists), representing the profession in our Trade Union as well as the Microbiology Professional Committee. He served as Scotland secretary before being elected as chair and representative on Council.

GREEN LABS: THE CARBON FOOTPRINT OF UNNECESSARY TESTS

LabMed were invited to host a Leaders Summit at the recent IBMS Congress in Birmingham. The day included varied topics, such as EQA, digital, AI and laboratory sustainability.

Past president, Kath Hayden, chaired the final session on how, by improving the quality of the tests that we perform, we can make positive inroads towards a net zero NHS. Tim Lang opened the session with an excellent overview of how each stage of laboratory testing contributes to its overall carbon footprint. He went on to explain how by preventing unnecessary tests, such as by implementing minimum retest intervals, carbon savings can be made. Tim highlighted the excellent work of minimum retest interval guidelines in paediatrics, and how these have now been adopted by various associations internationally.

Rob Shorten closed the day by making the case that diagnostic stewardship (doing the right test on the right person at the right time) can be a powerful tool to reduce the carbon footprint of our services. He described that many samples sent for microbiological analysis add little to patient care and can cause harm. Rob explained a few such interventions in his laboratory that have made meaningful reductions in unnecessary testing of swabs, urines and vitamin D.



Rob Shorten at IBMS. During the LabMed Leaders Summit he presented his talk, 'Diagnostic stewardship: a lever to lower carbon?'

UPCOMING EVENTS

Trainees' Day / Freddie Flynn Lecture 27 November 2025, London – 9am-5pm GMT

Hosted at the Royal College of Pathologists, this in-person event is a collaboration between the LabMed Trainees' Committee and RCPATH.

The morning session is geared specifically for trainees (from STP up to pre-consultant), featuring sessions such as an ice-breaker quiz on sample interferences, guidance on the FRCPath exams from an examiner's perspective and trainee case presentations.

After lunch, the programme opens out to all attendees with the Freddie Flynn Award Lecture (this year covering 'Insights into immunoassays and their pitfalls' by Gwen Wark), followed by talks on clinical microbiology and metabolic medicine.

This event offers a chance to engage with senior colleagues, gain insights into examination strategy, present your own work and catch up on key developments in immunoassay and diagnostic medicine.

[Book here](#)

LabMed National Audit Day 28 November 2025, London and online – 9am-5pm GMT

Running the next day, National Audit Day offers a platform to showcase and learn from the latest audits shaping laboratory services nationwide.

The agenda includes talks on audits in prostate cancer diagnostics, testosterone measurement, tumour markers and molecular diagnostics (e.g. ctDNA). Participants will also hear regional audit presentations, engage in poster sessions and connect with peers and national leads.

This event is ideal for clinical scientists, laboratory medicine consultants, audit leads, quality managers and any professionals interested in diagnostics, service improvement and clinical audit.

[Book here](#)

Why attend?

- **Professional growth:** Trainees benefit from exam insight and presentation experience; more senior professionals can lead audit dissemination and quality improvement.
- **Networking and collaboration:** Both days offer opportunities to meet peers, senior leaders and potential collaborators across specialties and institutions.
- **CPD value:** There is clear educational value, whether in audit methodology, immunoassay pitfalls, or insights into national audit strategies.
- **Dual-day momentum:** With the two events back-to-back, participants can stay in London, deepen their engagement and get exposure across training and audit tracks.

MEET THE NEW WORKFORCE LEADS

Louise Hawke, Workforce Lead

I'm really excited to be taking on this role with LabMed. I've spent my career as a clinical scientist in pathology and have always been passionate about supporting colleagues, promoting our profession and creating opportunities for career development.

At Worcestershire Acute Hospitals NHS Trust, where I work as a consultant clinical scientist in biochemistry, I've been closely involved in training and workforce development. I also chair the Healthcare Science Faculty within the Herefordshire and Worcestershire ICS Academy, which brings colleagues together across different disciplines to share ideas, tackle challenges and promote healthcare science. Through LabMed, I'll be working with the Education and Training Committee as well as LabMed's Exec team to make sure we are well represented at national stakeholder forums. I want to focus on creating clearer career pathways, ensuring fair recognition and opportunities for progression, and advocating for job plans that make space for education, research and leadership.



Daniel Hills, Deputy Workforce Lead

I'm delighted to be stepping into the Deputy Workforce Lead role. In my day job I'm a consultant clinical scientist in clinical biochemistry at Health Services Laboratories in Central London, where I lead on mass spectrometry and the urine steroid metabolomic profiling service. I'm also involved in teaching – supervising an STP trainee and lecturing on the adrenal medulla at Manchester – which I really enjoy.

As Deputy Lead, I'll be working closely with Louise and the Education and Training Committee to collect and analyse workforce data. This includes looking at future needs and responding to consultations that affect our profession. Having good evidence is vital to making the case for improvements in recruitment, retention and career structures, and I'm looking forward to contributing to that.

Outside of work, I live in Hertfordshire with my partner and our three cats. I'm a big fan of Ancient Greece and mythology and love exploring the Greek islands.



Together, we're looking forward to working with LabMed members to understand your experiences and keep workforce issues firmly on the agenda – Louise and Daniel

ANNALS OF CLINICAL BIOCHEMISTRY

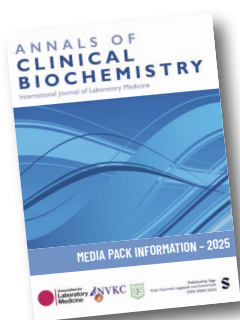
LATEST RESEARCH ARTICLES

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

[‘Tired all the time’: What general practitioners request and find in patients with tiredness/fatigue – an audit against NICE clinical knowledge summary of tiredness/fatigue in adults](#) – Sava Handjiev, Jennifer Nobes, Michael J Murphy, 2025

[Ubiquitin C-terminal hydrolase-L1 and glial fibrillary acidic protein tandem brain biomarker test in the prediction of CT evident brain injury: A prospective evaluation in the emergency department](#) – Jemima M Curran, Katherine Onions, Jessica Watts, Arnab Rana, Emma Hughes, James Allison, Jamie G Cooper, 2025

Click [here](#) to submit your work to the *Annals of Clinical Biochemistry*.



ADVERTISING IN ANNALS OF CLINICAL BIOCHEMISTRY

Promote your brand to a highly engaged audience of laboratory medicine professionals – advertising is now available in both the *Annals of Clinical Biochemistry* online journal and our member-wide emails. To find out more, contact Jason Brown, Advertising Manager, at jason@labmed.org.uk

PUBLICATION DATES

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 November for the December 2025 issue) to: editor@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 e-mail.

Advertising in LabMed News

Promote your brand to a highly engaged audience of laboratory medicine professionals – advertising is available in both the *LabMed News* online version and our member-wide notification emails. To find out more, contact Jason Brown, Advertising Manager, at jason@labmed.org.uk



NEW CONTRIBUTORS WANTED FOR LABMED NEWS

Would you like to contribute to our Future Perspectives column?

The LabMed News team are looking for new contributors to help write content for the Future Perspectives column to assist our current columnists.

If you have an interest in new developments within our profession or the wider scientific community, or are actively working on projects that will significantly impact pathology or simply wish to highlight good practice and would like to share your story with our readers, please do get in touch.

You can contact us either via the LabMed website or directly by emailing the editor at editor@labmed.org.uk

We look forward to hearing from you.

Gina Frederick

Lead editor, LabMed News

LABMED RESIDENTIAL TRAINING COURSE 2026 19-21 JANUARY | NOTTINGHAM

Advance your laboratory leadership and clinical science skills in three immersive days

WHAT YOU'LL LEARN

- Successful business case for strategic initiatives
- Developing tender specifications
- Building and managing laboratory networks

WHO SHOULD ATTEND

- Clinical scientists
- Lab managers
- NHS pathology teams
- Ideal for professionals stepping into leadership or service planning roles.

WHY ATTEND

- Learn from expert UK faculty
- Network with peers across disciplines
- Bursaries and member discounts available



Book now at labmed.org.uk

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:

Buthaina Al-Bahri, Chemical pathologist,
Ministry of Health, Oman

Sawsan Altom, Doctor, Great Britain

Kwame Amoh, Specialty registrar,
University Hospital of Wales, Cardiff

Madeline Baker, Student, Keele University,
Keele

Andrew Bosworth, Consultant clinical
scientist, Virology, UK Health Security
Agency, Bristol

Michael Chidambara, Trainee clinical
scientist, HSL (Health Service Laboratories),
London

Emma Crossley, PhD student, Queen's
University Belfast, Belfast

Caitlin Dollin, Trainee clinical scientist,
The Royal Hospitals, Belfast

Carrie Edwards, Trainee clinical scientist,
Biochemistry, York Teaching Hospital NHS
Foundation Trust, York

Tessia Evenor, Trainee clinical scientist,
Norfolk and Norwich University Hospitals
NHS Foundation Trust, Norwich

Jasmine Holdsworth, Trainee clinical
scientist, University Hospital of Wales,
Cardiff

Yassine Laksir, Postgraduate researcher,
University of Aberdeen, Aberdeen

Jeniffer Michael, Student, University of
East London, London

Aisha Usman, Specialist biomedical
scientist, Royal United Hospitals Bath NHS
Foundation Trust, Bath

Helen Valentine, Principal clinical scientist,
Biochemistry, Basildon & Thurrock
University Hospitals NHS Trust, Romford,
Essex

Rebecca Wade, Clinical scientist, Belfast



ARE YOU THE NEXT WINNER?

APPLY NOW

The **UNIVANTS** of Healthcare Excellence Award recognizes teams who collaborate across disciplines and transform healthcare delivery, and ultimately patient lives.



Does this sound like you and your team? If so, we want to hear from you. To learn more and apply now through November 15 visit **UnivantsHCE.com**.



© Abbott. All rights reserved.

IN PARTNERSHIP WITH



THE POWER OF TESTING: MAKING THE CASE FOR DIAGNOSTICS

Labmed supported *The Power of Testing*, a new report highlighting the urgent need to prioritise investment in *in vitro* diagnostics (IVDs) across the NHS. Developed by our strategic partner, Roche Diagnostics, in partnership with the Institute of Biomedical Science and supported by the Royal College of Pathologists, the report builds on the Government's NHS 10 Year Plan and shows how IVDs can transform patient care, efficiency and system sustainability.

Despite underpinning more than 70% of clinical decisions in the NHS, IVDs currently receive less than 1% of funding. This mismatch, the report argues, prevents diagnostics from reaching their full potential to support earlier diagnosis, personalised treatment and prevention-first, community-based care. By combining sufficient investment in IVDs with the expertise of the biomedical workforce, healthcare leaders could drive improvements in outcomes while also strengthening economic productivity.

Our members contributed their experiences to the survey that informed this report, providing real-world evidence of how IVDs are already delivering impact across the health service. Examples include rapid infection testing that has supported faster interventions and improved hospital bed management, as well as screening pathways that have dramatically reduced waiting times for heart failure diagnosis. These case studies show the scale of change possible if diagnostics are properly prioritised.

The Association for Laboratory Medicine joins its partners in calling for equitable funding for diagnostics, investment in the biomedical workforce and national leadership to embed IVDs into NHS planning. As an organisation representing professionals who use diagnostics every day, we will continue to advocate for the recognition, resources and innovation needed to unlock the full power of testing.

[Read the full report.](#)

The Power of Testing



LabMedUK26

Birmingham 8-10 June

Join us in Birmingham for:

- Plenary sessions: Impact award, laboratory medicine foundation award, interactive clinical cases, international lecture, Freddie Flynn lecture
- Parallel sessions on obesity, analytical performance specification, sustainability, diabetes, delivering scientific strategy across the nations, metabolic disorders, diagnostic neurology and acute medicine, medal award
- Poster sessions
- Industry sponsored workshops

SAVE THE DATE



LabMedUK26

Birmingham 8-10 June

SPONSORSHIP OPPORTUNITIES

ENGAGEMENT

Get your brand and products in front of a hyper-engaged audience of clinical scientists and laboratory medicine consultants.

BRAND

Build brand trust and loyalty through real experiences and showcase your values through meaningful sponsorship.

VALUE

Multiple package options available, with pricing to suit all budgets, including not-for-profits.

To discuss or book your sponsorship opportunity at LabMedUK26, please contact:
Tamsin Lawson, Events manager, tamsin@labmed.org.uk

TRAINEES' NEWS

TIPS ON RISING TO THE CHALLENGE OF BEING A TRAINEE AND A FIRST-TIME TRAINING OFFICER

As a clinical scientist undertaking the Higher Specialist Scientist Training (HSST) programme, I am well aware of the balance that is often difficult to strike between the day-to-day work in laboratory medicine and the need to study hard to progress. If you add being a training officer (TO) into the mix, would this balance topple over?

The thought may feel daunting, or you may feel a touch of imposter syndrome, but I found that becoming a TO for a trainee clinical scientist in my early years as a post-registration trainee has been rewarding, adding further value to my journey of progression.

In those initial stages as a TO, find those all-important "train the trainer" webinars on the National School of Healthcare Science's website, which are helpfully recorded to watch when you have availability.

From here, taking time to prepare is key. Know your trainee's rotations throughout their programme and create reminders to contact relevant departments in good time to ensure adequate accommodation.

Organise regular meetings with your trainee, perhaps in recurring time slots, to dedicate this time to your role in advance. The frequency of these meetings may decrease as training progresses; engage with your trainee to understand the level of support they require to benefit their training, whilst also staying on top of addressing tasks requiring completion and allowing concerns to be raised. We are all familiar with deadlines, so get to know your OneFile deadlines for signing off training activities, ensuring constructive feedback or corrections are provided to your trainee in a timely manner prior to reviews of progression. Pencil these into your calendar early and reserve time to go through them.

To aid your own study time, be assertive in setting boundaries and expectations with your trainee.



LAURA STEPHENS

Senior clinical scientist,
University Hospitals Plymouth
NHS Trust

Effective communication is vital; when discussing training activities, if you would prefer not to be reading long essays, make this clear. Where there are opportunities for another appropriate individual to be a point of contact when you are on study leave, or that any OneFile tasks could be delegated to, discuss and act on these to reduce that overwhelming workload.

To further assist with that workload, consider if there are ways that you can help your trainee to also help you. We all have those projects we want to undertake or continue with but do not have the time for; are any suitable for your trainee that could benefit their own learning along with the

department? A similar principle can be applied to your own learning and progression; can you use your experiences as a TO for reflective purposes, leadership and management opportunities or for inclusion in your HSST portfolio?

As a good TO, you and your trainee can work together to assist in each other's development. There may be more tasks on your seemingly never-ending list, but the enhancement of your organisational, approachability, teaching and communication skills, along with aiding your trainee to grow into an asset to your team, is beneficial to everyone in your department.

NATIONAL AUDIT DAY 2025

28 November 2025 | Royal College of Pathologists, London

National audit results on prostate cancer testing, testosterone and tumour markers

Clinical updates from experts including Richard Quinton, Kathryn Hawkesford, Andrew Seggie and Abel Tesfai

Sessions on emerging areas such as circulating DNA, molecular profiling and personalised cancer care

Book now at labmed.org.uk

UK STANDARDS FOR MICROBIOLOGY INVESTIGATIONS (UK SMIs)

Setting the Standard for Laboratory Best Practice

What are UK SMIs?

UK Standards for Microbiology Investigations (UK SMIs) are a comprehensive referenced collection of recommended algorithms and procedures for clinical microbiology.

These standards have been developed since 1996 by dedicated working groups of experienced medical and scientific microbiologists from across the UKHSA, NHS and privately run diagnostic laboratories alongside staff from the UKHSA Standards Unit. Documents are evidence-based, incorporate best practice and reflect expert opinion, without commercial bias or emphasis.

The benefits of UK SMIs are that they ensure standardisation of procedures across all laboratories and are updated to adapt and respond to advancements in the field.

The full collection of published UK SMIs is freely accessible on the UK SMIs webpage hosted on the [Royal College of Pathologists \(RCPath\) website](#) since 2023.

Who are they for?

UK SMIs are used by three main groups:

- Practicing laboratory professionals
- Clinicians
- Commissioners of healthcare services in the UK

Practicing laboratory professionals use them as a general resource to provide a high-quality microbiology and virology service. UK SMIs can be used by clinicians, including primary care clinicians and GPs, to find out the service they can expect for their patients, as well as providing important information on ordering the appropriate tests on the correct specimen type and how specimens should be stored and transported prior to



PENNY CLIFF

Surveillance section head & lead scientist, STI Reference Laboratory, UK Health Security Agency



ZAINAB SEBBAR

Healthcare scientist, Standards Unit, UK Standards for Microbiology Investigations

testing in the laboratory. This is particularly true since the recent development and introduction of syndromic UK SMIs.

Finally, commissioners of healthcare services can use UK SMIs to find the standard of microbiology investigations they can seek as part of the clinical and public health care package for their population.

UK SMIs are also an excellent resource for trainees and those revising for exams, particularly FRCPath Part 1 and Part 2. They contain useful nuggets of information that you may not come across day-to-day in a microbiology laboratory, such as biochemical tests that can be used for bacterial identification which are infrequently used in the days of widespread use of MALDI-TOF, or standardised comments for interpretation of syphilis tests.

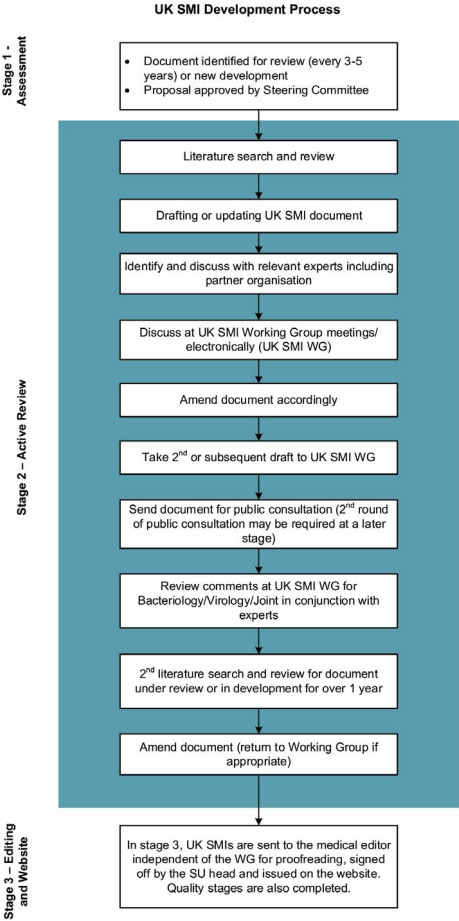
Why should I be interested in UK SMIs?

UK SMIs represent the standard of practice to which all clinical and public health microbiology laboratories in the UK are expected to work. They represent neither minimum standards of practice nor the highest level of complex laboratory investigation possible. Inspectors from the United Kingdom Accreditation Service (UKAS) auditing against ISO 15189 standards expect laboratories to follow procedures within UK SMIs, unless the laboratory has generated and recorded evidence showing that their alternative processes are acceptable. Therefore, if you work in an ISO 15189 accredited laboratory, you will need to be familiar with the most recent version of the documents and ensure your services are in line with them.

What is the process for their development and updating them?

The process of UK SMI development is accredited by UKAS to ISO 9001:2015. Every document follows a structured three-stage work flow overseen by the steering committee and working groups.

While the exact process can vary depending on the type of document for example, UK SMI Identification documents are usually electronically reviewed, and more complex documents may require subgroups – the general pathway remains the same. The summary flowchart below shows the three stages of UK SMI development.



What is the structure of the UK SMI Steering committee and working groups, and who represents LabMed on them?

There are over 20 professional societies that work in equal partnership to create UK SMIs, including the Association for Laboratory Medicine. You can check out the other partner organisations on the [UK SMI Development](#) page.

The Steering Committee oversees, advises and guides the activities of the UK SMI Working Groups and the development of standards. **Vasan Seshadri** is the LabMed representative on this committee.

The Working Group for Microbiology Standards in Clinical Bacteriology produces UK SMIs for investigation of different sample types for bacteria, parasites and fungi (documents prefixed with “B”), identification of medically important bacteria (documents prefixed “ID”) and testing procedures, such as biochemical tests and staining techniques (prefixed “TP”). **Penny Cliff** is the LabMed representative on this working group.

The Working Group for Microbiology Standards in Clinical Virology/Serology produces UK SMIs for virology and serology investigations, including those for some non-viral pathogens which are not routinely cultured such as *Chlamydia trachomatis*, and *Treponema pallidum* (documents prefixed with a “V”). **Kate Templeton** is the LabMed representative on this working group.

The Joint Working Group for the Development of Syndromic Documents has representatives from the Bacteriology and Virology Working Groups and is working on

developing syndromic documents (documents prefixed with an “S”). **Penny Cliff** represents LabMed on this group.

Which UK SMIs are the most popular – and what’s new?

From January to July 2025, these were the top three most accessed documents on the RCPATH website:

- UK SMI B 41 – Investigation of urine, issue 8.7
- UK SMI B 11 – Investigation of swabs from skin and superficial soft tissue infections, issue 6.5
- UK SMI B 57 – Investigation of bronchoalveolar lavage, sputum and associated specimens, issue 3.5

Below are three of the most recently published documents that you might find useful:

- UK SMI ID 1: Introduction to the identification of medically important bacteria and fungi from culture
- UK SMI B 10: Investigation of faecal specimens for *Clostridioides difficile*
- UK SMI S 6: Infectious syndromes affecting the genitourinary tract and reproductive organs



How can I contribute and get involved?

We would love you to get involved! Sign up at the [RCPATH website](#) to receive email notification of documents open for consultation and the publication of new or updated UK SMIs. Why don't you respond to a consultation and get yourself some CPD credits along the way? If you feel too inexperienced, team up with someone more experienced than you, it can be a valuable learning process. If you see something in a UK SMI that you think is no longer correct, contact the [Standards Unit](#) – issues raised

will be discussed at working groups and updates made at the next scheduled review, or occasionally outside of the review cycle where appropriate. Are you an expert in the field? If so, you are welcome to offer your expertise by [emailing the Standards Unit](#). Your expression of interest will be recorded and the team will be in touch where appropriate to support the review of the relevant documents.

Finally, keep your eye on your inbox, LabMed will send emails when documents are open for consultation or have been published.



The Royal College of Pathologists
Pathology: the science behind the cure

UK regionsInternational regionsVenue hireLog in to MyRCPath



Discover PATHOLOGYFor TRAINEESFor the PROFESSIONIn your SPECIALIST AREA

About the CollegeDocument library

HOME PAGE > PROFESSION > PUBLICATIONS > UK STANDARDS FOR MICROBI...

UK Standards for Microbiology Investigations

UK Standards for Microbiology Investigations (UK SMIs) are a comprehensive referenced collection of recommended algorithms and procedures for clinical microbiology. Our microbiology colleagues in Italy have kindly translated UK SMIs into Italian. To view the Italian translations, please visit the [SIMPIOS website](#).

For information regarding the ongoing update to all UK SMIs, please see the [UK SMI News](#) page.

For more information about the UK SMIs, please refer to our [FAQ](#)



UK SMI – Frequently Asked Questions

DECEMBER 2024



UK SMI News



Bacteriology



Virology



Identification



Quality-related guidance



Syndromic documents



Test procedures



National user manual



Withdrawn and recalled documents

About UK SMI

UK Standards for Microbiology Investigations (UK SMIs) are a comprehensive referenced collection of recommended algorithms and procedures for clinical microbiology.

UK SMI Consultations

Each UK SMI will undergo a public consultation for a minimum of 2 weeks. New UK SMIs generally have two rounds of consultation and previously issued documents tend to have one unless significant changes are made during the development process.

UK SMI Development

The UK SMI steering committee recommends and endorses ISO 9001:2015 certified microbiology standards. The committee oversees working groups, who are responsible for the laboratory clinical and public health input to the UK SMIs.

Supporting scientific information for UK SMIs

October 2025 | LabMed News | 27

MEETING REPORTS

THE 2025 VITAMIN D WORKSHOP – MONTREAL, CANADA

Thanks to a generous Regional Education Bursary from the Association for Laboratory Medicine, I had the opportunity to attend the 2025 Vitamin D Workshop in Montreal from 25-27 June. Since 1973, this international conference has brought together clinicians and researchers to explore the latest in Vitamin D science – from assay standardisation and defining deficiency, to establishing appropriate clinical target values. The conference fostered lively debate, updates on the latest research, and excellent networking – including a trip to Cirque du Soleil, which was founded in Montreal!

Vitamin D metabolites: clinical applications

For my STP project I'm currently developing an LC-MS/MS method to simultaneously measure Vitamin D metabolites, including 24,25-(OH)₂D₃ – an emerging metabolite of interest. A highlight of the conference was attending a talk by Glenville Jones, an internationally renowned Vitamin D researcher, whose many papers I've read whilst completing my project. His talk focused on the broader 'Vitamin D metabolome', including the clinical relevance of metabolites like 24,25-(OH)₂D₃ in disorders such as infantile hypercalcaemia (CYP24A1 defects) and the value of the Vitamin D Metabolite Ratio (VMR) in assessing Vitamin D status. Talks in this session also explored neonatal metabolism and the prominence of 3-epi-25(OH)D forms.

DEQAS and the push for accuracy

DEQAS, the international EQA scheme for Vitamin D testing – run within my NHS Trust – featured prominently. My colleagues Alex Shaw and Georgia Hackney, both senior clinical scientists and DEQAS administrators, presented at the conference. Alex discussed 3-epi-25(OH)D interference in 25(OH)D assays, impacting both LC-MS/MS and immunoassays and risking overestimation of Vitamin D. Georgia's poster on 1,25(OH)₂D measurement revealed high inter-method variability and stressed the need for recognised reference methods and accuracy-based EQA schemes. Their work underscored the critical role of EQA in driving quality improvement in Vitamin D diagnostics.



MEGAN SOUNESS

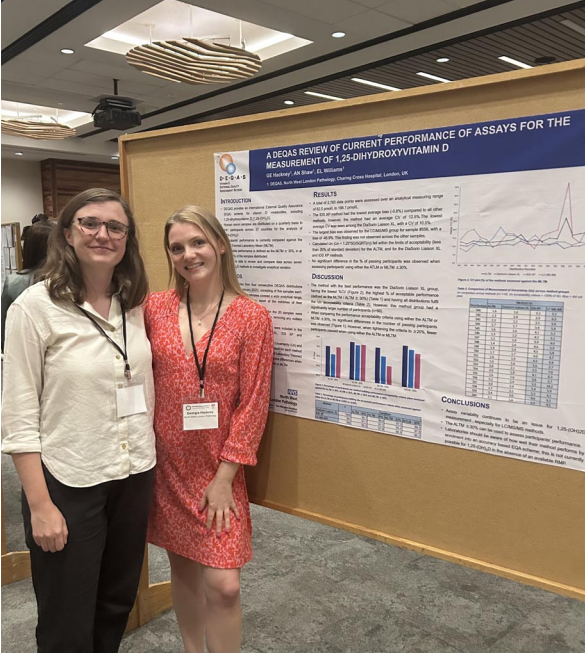
Trainee clinical scientist,
Imperial College Healthcare
NHS Trust



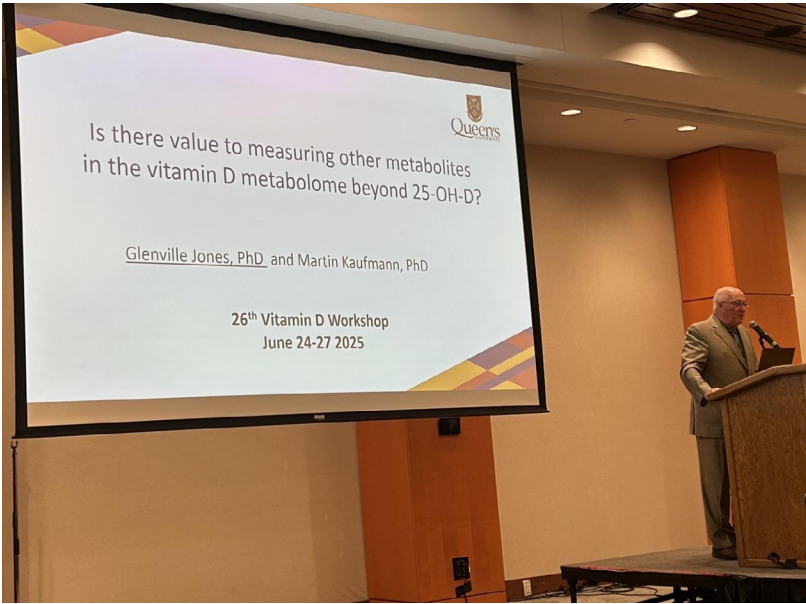
Vitamin D clinical trials: why so many questions remain

Another highlight was the closing debate on why so many Vitamin D trials fail to deliver clear answers. Rolf Jorde opened with a comparison of IOM (2011) and Endocrine Society (2024) guidelines, revealing conflicting views on deficiency, intake and targets. An expert panel, including original contributing authors to these guidelines, tackled issues around ethical trial design, especially the difficulty in recruiting truly deficient individuals. The discussion raised important points about trial methodology, population selection and how best to demonstrate the clinical benefits of supplementation in truly deficient patients, the population group who need it most!

Overall, this conference was an excellent insight into how research and clinical practice surrounding Vitamin D is developing. Key topics such as improving assay standardisation were reinforced and I had the opportunity to network with inspiring colleagues from across the globe. The next Vitamin D workshop will be held in Strasbourg, France in 2026, and I'd recommend anyone with an interest in Vitamin D and bone health to attend!



Megan Souness (left) and Georgia Hackney (senior clinical scientist) with Georgia's conference poster



Glenville Jones, speaker

ADLM2025 - BRINGING THE WONDER IN CHICAGO

The Association for Diagnostics and Laboratory Medicine (ADLM, formerly AACC), held its annual congress in Chicago in late July attracting over 16,500 laboratory medicine professionals. The themes of the meeting covered integration of genomics throughout the patient journey, the expansion and adoption of artificial intelligence within and outside the laboratory to support personalised medicine, innovations in biomarkers and how the laboratory is adapting to the pressures of the environment. These topics were delivered through a variety of learning styles from plenaries, roundtable discussion, scientific sessions with interactive participation and the popular poster discussion walks.



TIM LANG

Consultant clinical scientist,
The Newcastle Upon Tyne
Hospitals NHS Foundation Trust

The danger of social media

With the expansion of direct-to-consumer self-testing, as highlighted by the recent *BMJ* editorial and mailbase discussions, promoted under the banner of wellness, Tuesday's plenary by Timothy Caulfield from University of Alberta, Canada was very current. In his talk 'Infodemic! Is misinformation killing us?' he presented, in his unique style, the arguments for and against the trends set by influencers to promote products and lifestyle choices which may not have a scientific basis, highlighting the potential dangers. A valuable point was made that learning to critically think should be offered to all at the earliest possible stage even in primary education. The laboratory's role is to provide evidence-based advice on accessible platforms such as LabtestsOnline and ChoosingWisely.



Disruptive technology

Another highlight of this meeting was the opportunity to hear directly from biotechnology innovators about their novel technologies through the disruptive technology award competition session. In a Dragon's Den-style format the three finalists were each given the platform to describe how their innovative products will impact the patient pathway using new and emerging technologies to address current gaps in the market. Following each pitch an expert panel representing industry questioned them about the impact of each product before making their final decision. The audience also had an opportunity to choose their winner through the Congress App. On this occasion, both panel and audience agreed that the superRCA (Super Rolling Circle Amplification) technology, an ultrasensitive test for detecting rare cancer-causing mutations in blood or tissue samples from Rarity Bioscience, were deserved winners. The group, a spin out company from Uppsala University, have developed this ultrasensitive multiplex assay that can be applied to use with standard flow cytometers, making it immediately accessible to many laboratories and therefore supporting early detection of disease recurrence and monitoring treatment response.

Laboratory stewardship

There were several sessions focusing on laboratory stewardship, a theme of personal interest, given my work on minimum retesting intervals. An excellent interactive session entitled 'Laboratory test showdown! Winning with laboratory stewardship' was run by Alison Chambliss from the University of California and Jane Dickerson from Seattle Children's Hospitals / PLUGS (Patient-centred Laboratory Utilization Guidance Services). In this session they guided the audience through the journey of establishing a stewardship committee, highlighting the benefits using examples of stewardship interventions from their own



organisation before challenging the room to brainstorm solutions for two real-life examples. On the following afternoon it was my chance to present a session on counting the cost of inappropriate testing, highlighting the effect on workloads, the patient and the CO₂ footprint based on the Association's and Royal College of Pathologist's Minimum Retesting Intervals guidelines.

Networking

Outside the lecture theatres the conference provided lots of opportunity to network at the many mixer events, coffee breaks and during the large clinical lab expo, where over 800 exhibitors marketed their products. For those feeling active, the 3rd UN15K, a fun run/walk hosted in support of the UNIVANTS of Healthcare Excellence project provided a great way to start the congress and experience the shore of Lake Michigan whilst demonstrating unity and teamwork across laboratory medicine.

Attending ALDM2025 was a great experience and chance to observe how laboratory medicine is delivered over the pond in a different healthcare sector. Whilst being a very large conference it still provided the opportunity to make new connections whilst at the same time providing something for everyone. I would like to thank the ADLM organising committee for the opportunity to speak and the LabMedUK's Trent, Northern and Yorkshire regional committee for providing a bursary to support my attendance.

OBITUARY

STUART SMELLIE

1960-2025

Stuart Smellie, formerly consultant chemical pathologist at Bishop Auckland General Hospital, died in July from complications of ischaemic heart disease. He was the first chemical pathologist appointed to Bishop Auckland and had retired some years ago.

Stuart was born and brought up in Glasgow, and was exceptionally able academically, gaining scholarships to Glenalmond College in Perthshire, and to St John's College, Cambridge. He completed his clinical training at Oxford and subsequently did an SHO rotation that included six months in Brussels. He put the fluency in French that he acquired there to good use thereafter, translating medical and scientific papers throughout the remainder of his career.

In the late 1980s Stuart returned to Glasgow as a registrar in pathological

biochemistry, based at Glasgow Royal Infirmary (he was the last medical appointment made by Gemmell Morgan before the latter retired). He progressed relatively effortlessly through the hurdles of MRCPPath and wrote his DM thesis on clinical applications of proinsulin measurement. He had a formidable intellect; more than one colleague observed that he was probably the cleverest colleague they had worked with. The corollary of this was that he was easily bored, and, sometimes at least, did not do enough to conceal this! He was at his most engaged, and impressive, when grappling with unexplained clinical problems.

In 1994, Stuart took up a post as consultant chemical pathologist at Bishop Auckland General Hospital (BAGH). There he forged close working relationships with colleagues



Graham Beastall
presenting Stuart Smellie
with the President's
Shield in 2008

in pathology and throughout the hospital. He brought a practical approach to running the department, and had little time for what he saw as unhelpful bureaucracy. (By way of example, a broken freezer in the department triggered an immediate visit to the local white goods shop and a replacement was installed later the same day). He was key to the forging of closer working between laboratory disciplines at BAGH, one of the first places to embrace this. At national level, he became director of clinical practice at the Association for Laboratory Medicine, spearheading a series of best practice articles on various topics, aimed at general practitioners. Although such articles are now commonplace, these were ahead of their time, and some gained a relatively high profile. In recognition of this work, he was awarded the President's Medal in 2008.

Outside of work, much of his spare time was spent fishing. Reportedly he caught a trout on his first fishing expedition with his father at the age of six, which triggered a lifelong passion. He was also something of a *bon viveur*, on one occasion injudiciously arranging for a case of wine to be delivered to work. This was intercepted by the head of department, who happened to be passing through reception at the time. Although the handover was exceedingly embarrassing for Stuart, both parted in high good humour.

Stuart and Gillie's time in Durham saw the arrival of Eloise in 1995 and twins Bea and Susie three years later. As if family life wasn't busy enough, he also acquired an interest in house renovation, culminating in the publication of his book entitled *Old Buildings: Conversion and Restoration* – essentially a reflection on the family's experiences of renovating their old farmhouse.



Stuart Smellie with Jenna Waldron, Tim Lang, Hazel Borthwick, Tony Fryer and Danielle Freedman at an ACB Spotlight Meeting at the Royal College of Pathologists in October 2012. The event showcased demand management within laboratories and the impact on patient pathway. Stuart was passionate about demand optimisation and helping GPs in particular to make better requesting choices

Stuart was a kind and generous friend, whose dry wit was deployed as much against himself as anyone else, making him exceedingly good company. His death is tragically premature, and he will be sorely missed by his family and friends. He is survived by Gillie and the girls and his brother David.

MJM, JJ, MG

THE DIGGLE MICROBIOLOGY CHALLENGE

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 49 from the August issue

A two-year-old child presents with a barking cough, inspiratory stridor and low-grade fever. Chest X-ray shows subglottic narrowing. Which of the following statements about human parainfluenza viruses (HPIVs) is correct?

- A) HPIVs are double-stranded DNA viruses in the *Herpesviridae* family.
- B) HPIV-1 and HPIV-2 are major causes of croup in young children.
- C) The mainstay of treatment for HPIV infection is antibiotics.
- D) Infection with HPIV provides lifelong immunity against reinfection.

Answer

True

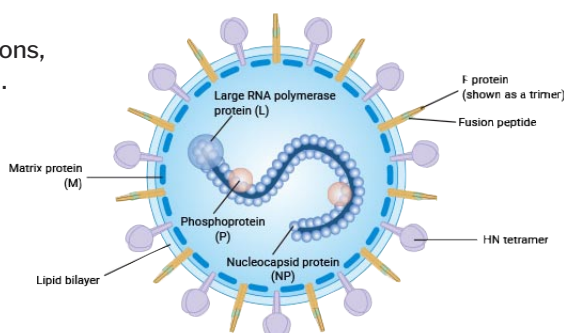
- B) HPIV-1 and HPIV-2 are the leading causes of croup (laryngotracheobronchitis) in children, which characteristically presents with barking cough and inspiratory stridor.

False

- A) HPIVs are single-stranded RNA viruses of the *Paramyxoviridae* family, not DNA viruses or herpesviruses.
- C) Antibiotics are ineffective, as HPIVs are viral; management is supportive, with corticosteroids used in severe croup cases.
- D) Reinfections are common throughout life, even though most children develop antibodies – immunity is not lifelong.

Rationale

- Recognise the typical clinical features and radiographic findings (barking cough, stridor, subglottic narrowing) of croup, a classic presentation caused by specific respiratory viruses.
- Distinguish between different viral families and genome types, fundamental virology knowledge required for appropriate diagnosis and laboratory work-up.
- Understand appropriate management principles of viral respiratory tract infections, an important diagnostic stewardship skill.
- Correctly identify the limitations of immunity following infection with respiratory viruses, crucial for counselling patients and predicting epidemiological trends.



Question 50

A 42-year-old returning traveller presents in September 2025 with fever, myalgia and cough. He had visited Réunion Island two weeks ago, where there has been a surge in arboviral infections. SARS-CoV-2 PCR is negative, blood cultures are sterile and dengue NS1 antigen is negative. RT-PCR of serum confirms Chikungunya virus RNA.

Which of the following statements is the most accurate regarding Chikungunya virus infection?

- A) Person-to-person respiratory transmission is well established in community outbreaks.
- B) Chronic arthralgia may persist for months after acute infection.
- C) Safe and effective licensed vaccines are widely available in the UK travel clinic setting.
- D) Infection is typically associated with haemorrhagic shock in severe cases.
- E) The vector responsible is primarily *Culex spp.* mosquitoes.

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

Get involved

**"WE CELEBRATE THE POWER OF
SCIENCE AND MEDICINE IN THE PURSUIT
OF HUMAN HEALTH AND WELLBEING"**

labmed.org.uk



Association for
**Laboratory
Medicine**

DEACON'S CHALLENGE REVISITED

NO 39. ANSWER

Two pure solutions of the same substance gave transmissions of 25.1% and 63.1% in the same spectrophotometer under identical conditions. What is the ratio of their absorbances?

.....

There are several approaches that can be used. It is useful to derive (then remember) an expression which directly relates percentage transmittance to absorbance:

Let I_o = intensity of incident light
 I = intensity of transmitted light

By definition:

$$\% \text{ Transmittance } (\%T) = \frac{I}{I_o} \times 100 \quad \text{and absorbance (A)} = \log_{10} \frac{I_o}{I}$$

Rearranging the expression for % transmittance gives:

$$\frac{I_o}{I} = \frac{100}{\%T} \quad \text{which can then be substituted into the expression for absorbance}$$

$$A = \log_{10} \frac{100}{\%T}$$

$$A = \log_{10} 100 + \log_{10} \frac{1}{\%T}$$

$$\text{Since } \log_{10} 100 = 2 \quad \text{and } \log_{10} \frac{1}{\%T} = -\log_{10} \%T$$

$$A = 2 - \log_{10} \%T$$

Values for %T can then be substituted directly into this expression to calculate the corresponding absorbance:

$$A_1 = 2 - \log_{10} 25.1 = 2 - 1.400 = 0.600$$

$$A_2 = 2 - \log_{10} 63.1 = 2 - 1.800 = 0.200$$

Their ratios are then calculated:

$$\frac{A_1}{A_2} = \frac{0.600}{0.200} = 3.0$$

Question 40

If the pH of urine is 4.5 and of blood 7.40, what is the gradient of hydrogen ion concentrations across the tubular cell walls?

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

SUSSEX CHALLENGES



Points of interest in this set of data will be addressed in this and the next Sussex Challenge.

Challenge 2

A male aged 40 years was found unconscious – presumed overdose. Serum creatinine four months earlier was 85 µmol/L.

Analyte	Admission	Units	Ref Interval
Serum sodium	148	mmol/L	136-145
Serum potassium	5.4	mmol/L	3.2-5.1
Serum chloride	111	mmol/L	98-107
Serum bicarbonate	7.0	mmol/L	22-29
Serum urea	4.0	mmol/L	1.7-8.3
Serum creatinine	136	umol/L	59-104
AKI Alert	Alert 1		
Serum C-reactive protein	3.0	mg/L	<5
Plasma glucose	5.2	mmol/L	
Serum albumin	51	g/L	35-52
Serum adjusted calcium	1.80	mmol/L	2.20-2.62
Serum phosphate	1.67	mmol/L	0.81-1.45
Serum total bilirubin	6	umol/L	0-21
Serum alkaline phosphatase	84	U/L	40-129
Serum ALT	21	U/L	0-41
Serum salicylate	<10	mg/L	
Serum paracetamol	<10	mg/L	
Plasma ethanol	N/D*		
Plasma lactate	8.9	mmol/L	<2.0
Serum osmolality	345	mmol/kg	280-295
POCT Blood lactate	19	mmol/L	<2.0
POCT Blood pH	6.99		7.35-7.42
POCT Blood pO ₂	4.69	kPa	12.0-15.0
POCT Blood pCO ₂	3.52	kPa	4.5-6.1
POCT Blood std bicarbonate	7.5	mmol/L	22-26
POCT Blood base excess	-24.2	mmol/L	±2

1. How do you interpret his blood gas findings?
2. What comments do you have on his blood lactate result?
3. What do you calculate his admission anion gap to be?
4. What causes of a raised anion gap do you recognise?
5. How do you think ethylene glycol is metabolised and causes an acidosis?

Commentary

1. How do you interpret his blood gas findings?

His pH indicates a severe acidosis with standard bicarbonate and base excess results indicating this is metabolic in nature. His PaCO₂ indicates minimal respiratory compensation. The results indicate this is a venous sample, as the pO₂ is exceedingly low (if it was an arterial sample, it would indicate type 1 respiratory failure and would probably be incompatible with life). Both renal impairment and a markedly raised blood lactate concentration are possible explanations of his acidosis.

2. What comments do you have on his blood lactate result?

The first consideration is that the pO₂ suggests that the blood sample is probably a venous sample. The second consideration must be the method used for the analysis of the blood sample. The POCT blood lactate result is from a blood gas analyser and therefore is at risk of providing a false result. Due to the lack of specificity of lactate oxidase, blood gas analysers that use this assay method for lactate measurement also measure glycolic acid, a breakdown product of ethylene glycol, due to the lack of specificity of this enzyme. So, measurement of plasma lactate in the laboratory by a method using lactate dehydrogenase is indicated. The rise in NADH:NAD ratio caused by alcohol dehydrogenase metabolism of alcohol or ethylene glycol favours the formation of lactate from pyruvate. In addition, the formation of aldehyde and acid metabolites from ethylene glycol have been reported to inhibit oxidative phosphorylation thus promoting lactic acid accumulation.

3. What do you calculate his admission anion gap to be?

You may have used one of these two formulae:

$$\text{Anion Gap} = \text{Na} - (\text{Cl} + \text{HCO}_3)$$

$$\text{or} \quad \text{Anion Gap} = (\text{Na} + \text{K}) - (\text{Cl} + \text{HCO}_3)$$

Reference interval 3-11 mmol/L

Reference interval 10-20 mmol/L

His anion gap = 30 mmol/L

His anion gap = 35.4 mmol/L

4. What causes of a raised anion gap do you recognise?

There are many mnemonics for the causes of a high anion gap metabolic acidosis – GOLDMARK has been recommended in a *Lancet* letter*

- G – glycols (ethylene glycol and propylene glycol)
- O – oxoproline, a metabolite of paracetamol
- L – L-lactate, the chemical responsible for lactic acidosis
- D – D-lactate, formed by intestinal bacteria
- M – methanol
- A – aspirin
- R – renal failure
- K – ketoacidosis, ketones generated from starvation, alcohol, and diabetic ketoacidosis

*Metha A N et al. 2008. GOLD MARK: an anion gap mnemonic for the 21st century. *Lancet* 327, 892.

5. How do you think ethylene glycol is metabolised and causes an acidosis?

Ethylene glycol is metabolised in the liver by alcohol dehydrogenase into glycoaldehyde, which is then further metabolised into a number of toxic metabolites, including glycolic acid, glyoxylic acid and oxalic acid, resulting in a profound metabolic acidosis, mostly due to glycolic acid.

Further, oxalic acid crystallisation in the renal tubules may lead to acute kidney injury. Fomepizole, an inhibitor of alcohol dehydrogenase, is used in the treatment of ethylene glycol poisoning.

Cases for thought

If you have not been receiving these recently it could be due to changes in your organisation's e-mail system or your organisation blocking external e-mails. These cases are being sent out every two weeks so please check your e-mail address or use a private address – just e-mail giffordbatstone@gmail.com

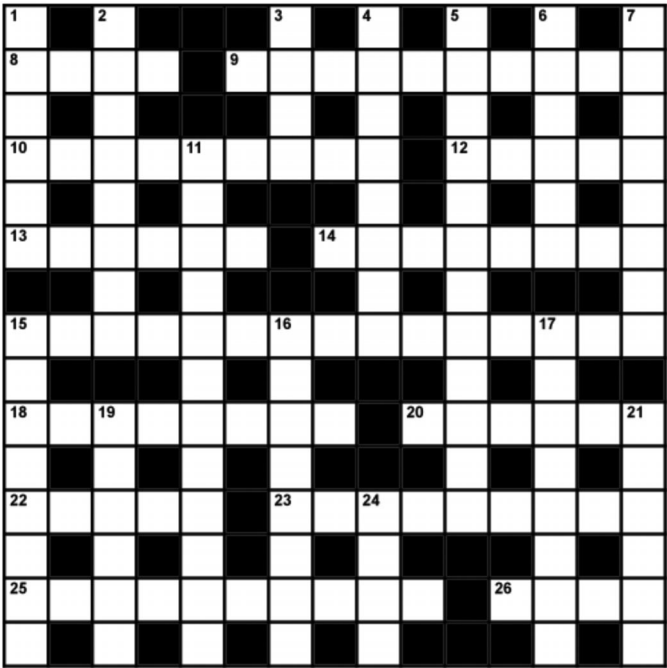
THE CROSSWORD BY RUGOSA

Across

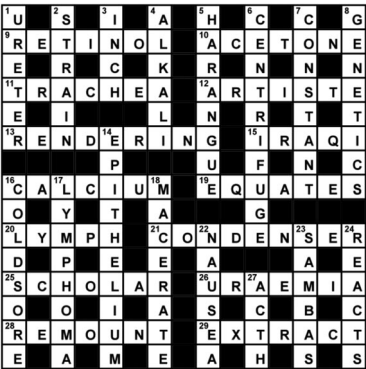
- 8 Stand for close (4)
- 9 Employed in food transport, drunken hog eats soup without first tasting (10)
- 10 Use statins as auxiliary (9)
- 12 Oak-aged wine, possibly even try it on Juan (5)
- 13 Laboratory vessel counter (6)
- 14 Plant species: opt out of erroneous ascriptions (8)
- 15/25 Hothead omitting drug? Recuperation exceptional given this analytical support (11, 4, 10)
- 18 Fitting pipes to a convertible (8)
- 20 Screen data cache (6)
- 22 Big gang has stash we hear (5)
- 23 Young society lady might perhaps be taunted (9)
- 25 See 15
- 26 Previously a sort of cone (4)

Down

- 1 Spoil scamp having mood (6)
- 2 Test case used small container (8)
- 3 Materials for 7 will be Spanish (4)
- 4 Shorten engagement (8)
- 5 Dutch croci at renovated van Hoorne's canal (8,4)
- 6 Houses US soldier up on solitary correction (6)
- 7 Trying doctor gainsays (8)
- 11 Reshaped sets constructed for data presentation and computation (12)
- 15 Ham actor developed eye trouble (8)
- 16 Code term used for the origin of the CNS (8)
- 17 Rectification makes finer gin (8)
- 19 Apparently embracing relation (6)
- 21 Felt dizzy having cartwheeled – watch out! (6)
- 24 Union agreement (4)



SOLUTION FOR AUGUST'S CROSSWORD



SUDOKU ... THIS MONTH'S PUZZLE

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

SOLUTION FOR AUGUST

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

Become a member

**"WE CELEBRATE THE POWER
OF SCIENCE AND MEDICINE
IN THE PURSUIT OF HUMAN
HEALTH AND WELLBEING"**

- Access learning and resources
- Meet great colleagues and develop your career
- Join our events, win prizes and get funding support
- Enjoy trade union benefits and help shape the future of laboratory medicine

labmed.org.uk



Association for
**Laboratory
Medicine**

LabMedNews

The Editor is responsible for the final content; advertisers are responsible for the content of adverts. Views expressed are not necessarily those of the Association for Laboratory Medicine.

Lead editor

Gina Frederick

Pathology laboratory
Royal Derby Hospital
Email: gina.frederick1@nhs.net

Associate editors

Sophie Barnes

Department of clinical biochemistry
Charing Cross Hospital
Email: sophiebarnes@nhs.net

Nicola Merrett

Department of laboratory medicine
University Hospital Southampton
NHS Foundation Trust
Email: nicola.merrett@uhs.nhs.uk

Christopher Pitt

Department of biochemistry
NHS Ayrshire & Arran
Email: christopher.pitt@aapct.scot.nhs.uk

Jenny Hamilton

Department of clinical chemistry
Southern Health & Social Care Trust
Email: jenny.hamilton@southerntrust.hscni.net

Elizabeth Ralph

Immunology, Camelia Botnar laboratories
Great Ormond Street Hospital
Email: e.ralph@nhs.net

Stephen Kidd

Department of microbiology
Hampshire Hospitals NHS Foundation Trust
Email: stephen.kidd@hhft.nhs.uk

Ijeoma Okoliegbé

Department of medical microbiology
and virology
Aberdeen Royal Infirmary
Email: ijeoma.okoliegbé@nhs.scot

Philip Wood

(retired)

Situations Vacant advertising

Please contact the Office:
Tel: 0207-403-8001
Email: admin@labmed.org.uk

Advertising

Jason Brown, advertising manager
Email: jason@labmed.org.uk

Design and layout

Nikki Williams

Headquarters

Association for Laboratory Medicine

130-132 Tooley Street
London SE1 2TU
Email: admin@labmed.org.uk

President

Ian Godber
Email: president@labmed.org.uk

CEO

Victoria Logan
Email: victoria@labmed.org.uk

Home page

<http://www.labmed.org.uk>

LinkedIn

<https://www.linkedin.com/company/association-for-laboratory-medicine/>

Instagram: @labmed_uk



Association for
**Laboratory
Medicine**