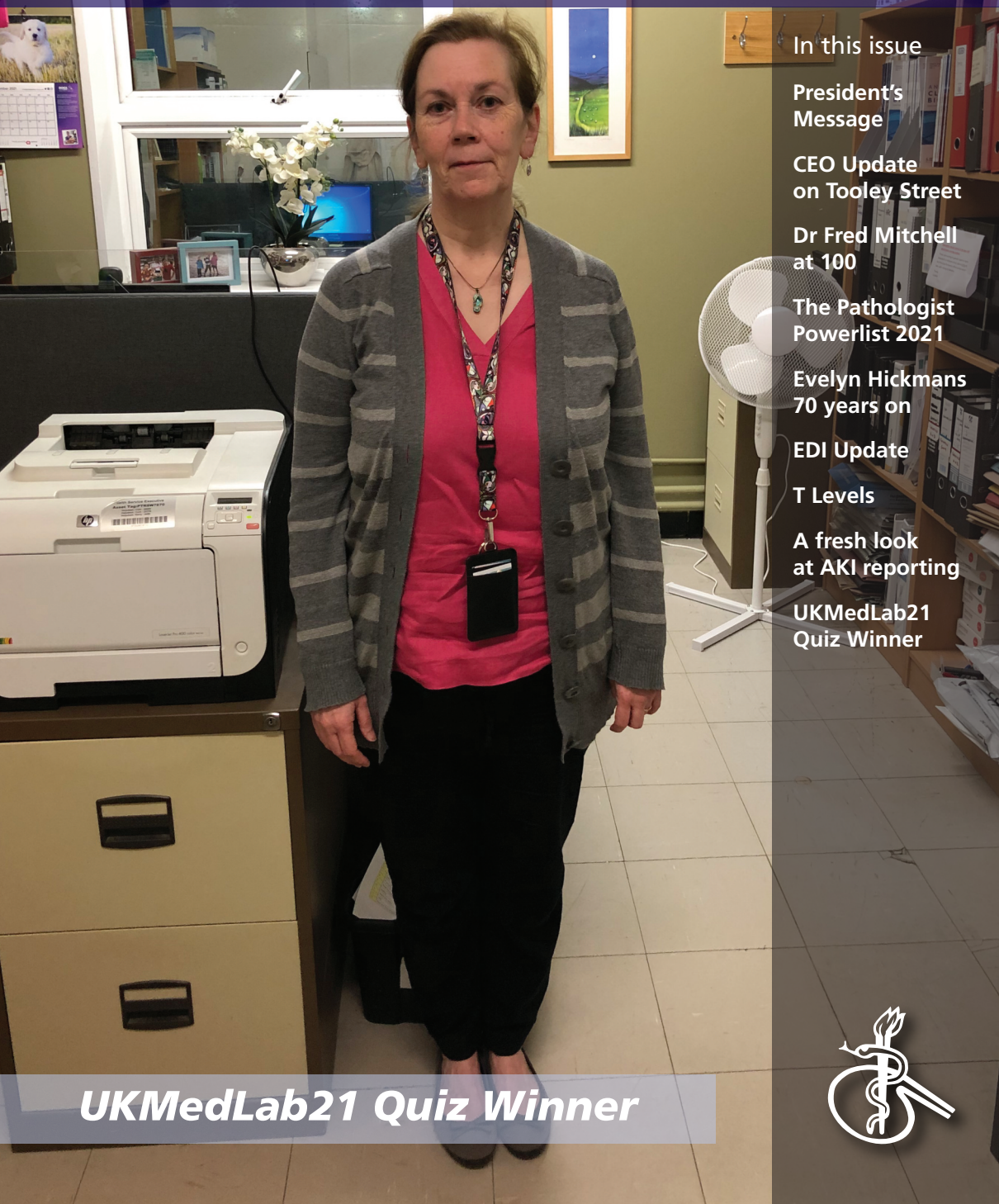


ACBNews

The Association for Clinical Biochemistry & Laboratory Medicine | Issue 673 | October 2021



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The bi-monthly magazine for clinical science

Issue 673 • October 2021

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The Association for
**Clinical Biochemistry &
Laboratory Medicine**

Better Science, Better Testing, Better Care

ISSN 2754-0863

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Front cover: Alison Bransfield – the UKMedLab21 Quiz Winner

President's Message – October 2021

Many of us working within the NHS will be witnessing increasing pressure on our services, which will likely escalate through winter. The potential for increasing COVID-19 admissions added to the already heavy burden of waiting lists, cancer backlogs, staff shortages and severe pressures on Primary Care will mean that our services will be even more important than before. Within the ACB, we are planning to develop our “Build Back with Labs” programme to provide a series of resources that can be shared to enable laboratory services to remain potent and appropriately used. Shared experience, resources and collaborative working will be vital going forwards.

The Becton-Dickinson blood tube shortage issue recently experienced is likely to be the first of many impending supply chain issues that further highlight the need for good demand optimisation practices to be embedded within healthcare and ensure unnecessary testing is minimised. The ACB has been directly involved in discussions within NHS England, Scotland and Wales with mitigation plans and guidance being developed – see

<https://www.acb.org.uk/our-resources/news/nhs-guidance-on-blood-tube-shortages.html>

The Getting It Right First Time (GIRFT) Pathology report has finally been published after several years of fact finding by the GIRFT team – [click here to read the report](#). Many of the recommendations, while not new, provide the opportunity for the ACB to look to working collaboratively with other professional bodies and emerging Pathology Networks – particularly in the



areas of IT systems, standardisation, demand optimisation and workforce planning. These are important topic areas not just for England but the rest of the UK. Over the coming weeks, the ACB will be working up a detailed response focussing on how some of these recommendations could be tackled, bearing in mind of course that there is no associated direct funding or any supportive infrastructure from the GIRFT programme itself.

Finally, we will all be aware of the great success that Lab Tests Online (LTOL) has become in recent years. The ACB are currently working with the LTOL Board and other stakeholders to determine the way forward for this important resource following the sale of its parent LTOL-USA to a commercial company by its previous owners, AACC. We'll keep you updated as plans progress.

Best wishes to all during what are likely to be very difficult months ahead. ■

Bernie Croal, ACB President



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*analyser dependent

Message from the CEO

As we start to move into autumn things are gradually beginning to open and to return to our more usual ways of working. We have (cautiously) reopened the ACB offices to staff and members and have had a small number of face-to-face meetings during September.

Our meeting facilities have moved to the third floor and are working well, including our new remote meeting equipment, and the staff are back on a split working pattern. We've found a buyer for the now unused fourth floor which will enable us to both reduce our outgoings and increase our reserves for the future.

Plans are well underway for 2022 with new training initiatives planned and a mentoring scheme pilot. You will be receiving a survey regarding the latter shortly. Work has commenced with committees to embed our strategic themes of inclusivity, environmental sustainability and innovation across all our activities, and we are continuing to build our links with industry through long term mutually beneficial strategic partnerships. Abbott has been the pioneer company for this partnership approach with the ACB and we are delighted to be working with them to promote the UNIVANTS programme for clinical excellence in healthcare.

Work has started on UKMedLab22 which will take place as a face-to-face meeting in



London towards the end of 2022 and we hope to announce the date in the next few weeks to enable you to plan your diary for next year. It will again feature a National Training Day, a Science and Education programme, and a Leadership and Management programme. We are also in discussion with potential partners about additional complementary content. More news will follow over the coming months.

It is great to see four of our members in the [2021 Pathologist Power List](#) (see page 11 for further information). This is valuable recognition for those individuals and their work as well as the ACB and the profession as a whole.

Hoping to see you at the ACB soon. ■

Bromide Analysis

Bromide salts are increasingly being used to treat refractory seizures in children with epilepsy.

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Molecular Diagnostics availability in Biochemistry labs – 2021 survey

Alexandra Yates and Dimitris Grammatopoulos, ACB Scientific Affairs & Clinical Practice Committee

The ACB Scientific Affairs & Clinical Practice Committee are trying to understand the type of specialist testing Clinical Biochemistry staff and laboratories are involved in. Various molecular tests are increasingly embedded in the repertoire of diagnostic tests performed by Clinical Biochemistry as part of specialist clinical services.

Our survey aims to capture this activity to ensure we have an accurate national picture and that future planning and resource allocation engages with all laboratory settings. [Please fill in the survey](#) by 21st October 2021. ■

Meet Alison Bransfield – our UKMedLab21 Quiz Winner

Alison started her career in Biochemistry in the Bon Secours Hospital, Cork and now works in Cork University Hospital. She is on the ACB Republic of Ireland Region Committee and also on the ACB Web Development Committee. Alison is also a Technical Assessor for INAB (the Irish equivalent of UKAS), assessing in Clinical Biochemistry, point-of-care and IT to ISO15189, 17025 and 22870. ■



Sudoku

This month's puzzle

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

Solution for August

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

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Equality, Diversity and Inclusion 2021: Conferences and Events



Rachel Wilmot, Equality, Diversity & Inclusion Champion

In the last edition of *ACB News* I reported on our overall progress on the Science Council's Diversity and Inclusion Benchmark.

In future updates I want to share progress we have made and are continuing to make across all areas of our operations and activities.

This month I'd like to focus on Events, Meetings and Conferences, led by ACB Conference and Events Director, Sarah Robinson, alongside ACB CEO, Jane Pritchard.

The benchmark asks us to complete a self-analysis of our maturity on all our activities across four levels: initiating, developing, engaging and evolving and sets parameters around each level.

In the 2021 Benchmark we progressed to Level 3 – Engaging – which asks that the case for change is well established and that qualitative data is being gathered and shared, that there is sustained senior support in place and that there are clear signs of change. It also requires that there is a plan of action to increase the diversity of speakers and attendees at meetings, conferences and events. This may include challenging plans for events with non-diverse speaker lists, sending out calls for proposals for networking groups or encouraging people from multiple diversity groups to attend speaking development programmes.

We felt we have made substantive steps during 2020 and 2021. The development of

our virtual events programme has made attendance more accessible to those with caring responsibilities and/or special audio-visual or mobility needs. Recording of meetings has also helped in this regard. For physical events we ensure that venues are fully accessible. Our Conference and Events Committee is committed to ensuring that speakers are a fair reflection of the demographics of the membership/profession and to consider potential barriers for awards at events.

We have identified a need for improved gender balance and are planning to introduce a pairing scheme between established and emerging scientific leads to address this. In 2020 we introduced an emerging leaders delegate rate to improve accessibility for younger, more diverse delegates and we have adopted the Royal College of Pathologists' anti-bullying policy relating to debates and questions at events.

Our ambition for 2022 and beyond is to move to Level 4 – Evolving – whereby the approach to change is focussed on transforming the culture and systems of the organisation, and we can demonstrate clear evidence of sustained behavioural and cultural change on diversity and inclusion in all our meetings, conferences and events.

As always I welcome interest and engagement from members so please do get in touch if you'd like to get involved. ■

ACB Members on the Pathologist Power List 2021

Jane Pritchard, CEO

The Pathologist Power List is an annual celebration of the great and inspirational minds that underpin the medical laboratory. For 2021 it presented some of the most inspirational Pathologists and Laboratory Medicine professionals in six different categories: **Behind the Scenes** (for non-Pathologist laboratory professionals), **In the Spotlight** (for outreach and advocacy), **In the Wings** (for those early in their careers), **Leading Roles** (for educators and mentors), **Showstoppers** (for drivers of discovery) and **Front (line) and Centre** (for pandemic heroes).

The ACB was proud to see four of our Members recognised across three of these categories:

- ◆ **Past President Neil Anderson** was recognised as a Showstopper for demonstrating exceptional leadership

in pathology and for leading the profession at a national level that is highly influential internally.

- ◆ **Elaine Cloutman-Green** was awarded In The Spotlight for her infection work in public health and education.
- ◆ In the Front (line) and Centre category, **Catherine Moore** was recognised as a pandemic hero for her work at the Wales Specialist Virology Centre, as was **Martin Myers** for his pandemic leadership within the NHS and work with NHS Supplies.

The list is an important recognition of excellence in Pathology, so many congratulations to all four ACB Members this year and we hope to see even more of our Members on the list in 2022.

Find more information on the [full list here](#). ■



Neil Anderson



Elaine Cloutman-Green



Catherine Moore



Martin Myers



Festschrift in celebration of the career of Dr Simon Olpin

Virtually via Zoom on Monday 18th October 2021, 13:30-17:00

- 13:30 Welcome and introduction
Katherine Wright
- 13:40 Scientific Session 1
Chair: *Joanne Croft*
- 13:40 Sudden infant death, MCADD and the mitochondrial respiratory transport chain: breathing with Simon
Professor Marta Cohen, Sheffield Children's Hospital
- 14:10 Diagnosing IMDs in the labs – we all need a mate!
Professor Simon Heales, GOSH Institute of Child Health
- 14:40 Clinical cases
Dr Mark Sharrard, Sheffield Children's Hospital
- 15:10 Comfort break
- 15:20 Scientific Session 2
Chair: *Camilla Scott*
- 15:20 Simon and Riboflavin-Responsive MADD: a vitamin boost for science and a young researcher
Dr Rikke Olsen, Aarhus University Hospital, Denmark
- 15:50 Botanicals, IMD and the occasional dart frog!
Dr Simon Olpin
- 16:20 Simon Olpin – a celebration!
Dr Camilla Scott
- 16:50 Closing remarks
Katherine Wright

If anyone has any photographs, memories, or written contributions that they would like included in a memory book that we will be putting together for Simon, or a short video message that we hope to include in a celebration of Simon's career, please e-mail these to joanne.croft4@nhs.net

There is no charge to attend this virtual meeting.

If you would like to attend this event, please contact Jacqui McAleer, JM Associates, via email: jmassociates1@me.com ■



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Dr Fred Mitchell: A journey with the ACB

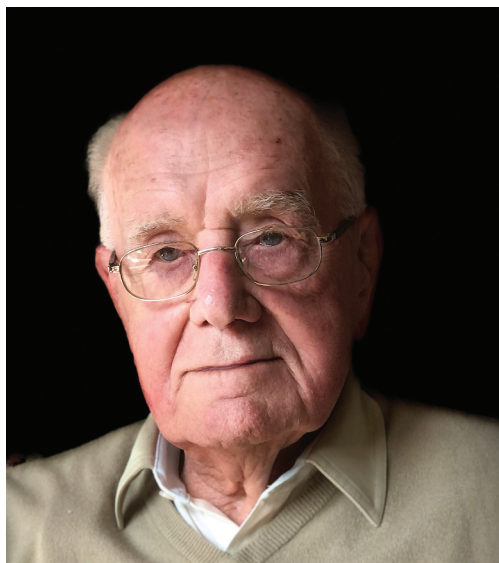
Mrs Ruth Lapworth MBE

This article describes the contributions to the ACB by one of its longest serving and possibly, in his 100th year, one of the oldest surviving founder members, Fred Mitchell, DSc PhD FRSC FRCPath

Fred Mitchell began his working life during WW2 as a pilot in the RAF for five and a half years. After the war, he chose to begin his long and industrious career in Clinical Biochemistry.

The ACB was founded in 1953, nine years before the Royal College of Pathologists, by a small group of London professors led by Earl J. King, and stimulated by a few in the North including Fred Mitchell. The idea was to bring together scientists across the UK who were working in the emerging discipline of Clinical Biochemistry within universities and the NHS. For several years, the ACB operated with locally organised group meetings. Fred began his long journey with the ACB in 1954 as Secretary of the NW Region. In these early days there was no central office support; administrative backup was provided by each officer's secretary at their place of work.

A professional committee (now the Federation of Clinical Scientists) was started in 1962 to provide advice and Trade Union type cover for non-medical



scientists. This was necessary as, unlike their medical and BMS colleagues, scientist members of the ACB were not covered by a Trade Union. Dr Mitchell was the first Secretary of this branch of the ACB, gaining relevant experience as the Scottish representative on Council from 1961-1963. The work undertaken by Fred and the first Chair of the Professional Committee (Professor Grant Lathe) resulted in a key article on the staffing of NHS Clinical Biochemistry laboratories, published in *The Lancet* in 1966.

Dr Mitchell became Chairman of the Professional Committee (by then a registered Trade Union) in 1974, coinciding with a major reorganisation of the NHS. During his chairmanship he was responsible for the production of the 'Mitchell Report' which formed the basis of the subsequent staffing structure for Clinical Biochemists. From 1970-1972 he was Chairman of the ACB. It is very

unusual for an ACB member to have contributed to the ACB as Chair of both the ACB and the FCS, while incidentally at the same time being the first non-medical member of the RCPATH Council.

Two key changes to the structure of the ACB were implemented during his time as Chairman of the ACB. The first was to implement an Executive Committee to deal with business arising between Council meetings. The second was to allow industrial companies to join the ACB as Corporate Members. A further key development during Fred's tenure was to persuade his counterpart at the Royal College of Pathologists to play a role in organising quality control programmes for UK pathology laboratories. Fred completed his journey with the ACB as President for two years from 1979 and was elected an Honorary Member on his retirement.

On the international front, Dr Mitchell represented the ACB for 10 years on the

councils of the International Federation of Clinical Chemistry (IFCC) and the International Union of Pure and Applied Chemistry (IUPAC). His recollection is that one of the most fruitful appointments he ever received was to form, and be, the Chairman of an international IFCC Expert Panel on Instrumentation, a position which he held from 1975-1979, helping the international development of instruments over a difficult period. At an ACB national meeting in Brighton he was also involved with the formation and running of the European Committee for Clinical Laboratory Standards (ECCLS), reflecting his desire to standardise Clinical Chemistry practices across Europe. Professor Magnus Hjelm was the first chairman, followed by Fred.

It is remarkable that one man has been involved in so many initiatives during his journey with the ACB, and his contributions continue to set the tone for Clinical Biochemistry practice to this day. ■

What are T Levels in Healthcare Science and why should I care about them?

Dr Elaine Cloutman-Green, Consultant Clinical Scientist (Infection Control Doctor), Deputy Director of Infection Prevention and Control, Joint Trust Lead Healthcare Scientist, Clinical Lecturer, Department of Civil, Environmental and Geomatic Engineering, UCL

In 2017 I saw an advertisement from the Department of Education looking for an employer representative to sit on a panel to develop a new vocational qualification, to be known as the Technical Level, or T Level, for Healthcare Science. This came about as part of a wider educational review looking at how to change vocational qualifications so they are better aligned with what employers are looking for, and to fit in better with other routes, such as apprenticeships and A-Levels. I was lucky enough to be selected. For the next year, a panel of fellow Healthcare Scientists, educators and Department for Education representatives met monthly to design a new qualification to help budding scientists access the Healthcare Science profession. Since then we have been working with further education teams to roll out the qualification, and the T Level launching for early adopters in September 2021 is the result.

So what is a T Level?

T Levels are equivalent to three A-Levels and offer an intermediate choice between traditional academic routes into Healthcare Science, i.e. A-Levels followed by undergraduate study, and Healthcare Science apprenticeships, which are 80% workplace-based and 20% Further Education-based. T Levels are 80% based in a Further Education institution and have a 20% work placement.

They are broadly split into three components:

1. **Technical Qualification:** the main classroom-based element. Students will learn about different areas of Healthcare Science through a curriculum designed by employers and developed by an awarding organisation.
2. **Industry Placement:** this runs for a minimum of 315 hours (45 days) overall, and will give students practical insights into their sector, and an opportunity to embed the knowledge and skills learned in the classroom.
3. **English, maths and digital provision:** built into the classroom-based element of the T Level, meaning students will be given a solid foundation of transferable skills.

As T Levels are also eligible for UCAS points, when a student completes the T Level, they can either choose to progress to further education, via an undergraduate degree, or can enter a degree-level apprenticeship scheme and continue via workplace-based progression.

Why should we care?

One of the problems faced by the Healthcare Science profession is that routes into it are becoming much more structured than they were when I entered 17 years ago. In many ways this is great,

Technical education routes roll-out



and provides a much better quality of training and structured career progression. The downside is that students need to be aware that Healthcare Science exists as an option in order to choose the right degree or entry point. By providing a course like this early to students before university, it will enable them to make more informed choices about the courses that are right for them, as well as raising awareness of the profession. For those students who opt to continue onto the apprenticeship route, it provides employers with a growing pool of students who will be well placed to apply for these roles, already equipped with the knowledge and experience of what it means to be a Healthcare Scientist.

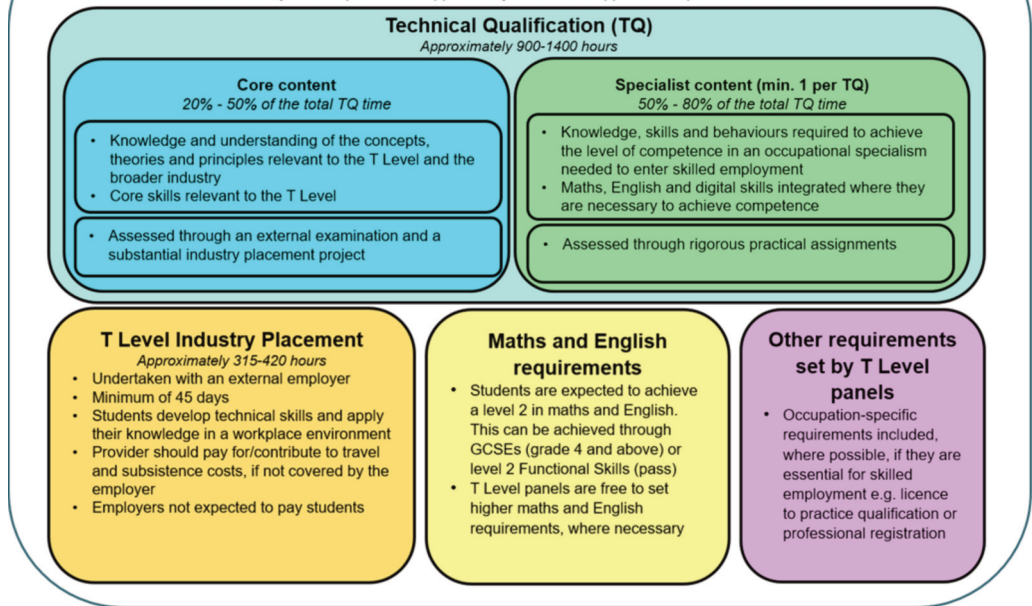
What does all this require of me?

To make the new T Level work, we will need to engage with it as a profession. This will include linking in with Further Education establishments to offer expertise to support the launch, in order to ensure high quality delivery. The main thing we need to think about, however, is whether we can provide sites for the work-based placements. T Levels will help improve our candidate pool, and ensure that we have access to improved recruitment in the long term. To achieve that, however, we will need to ensure that students really do have a good idea of what we do, and what a job in this great profession could look like. We can only deliver on this if they are able to meet us.

How a T Level course works

1800 hours over two years (with flexibility).

Outline content set by T Level panels and approved by Institute for Apprenticeships and Technical Education



The 'ask' therefore is to reach out to the communities our Trusts support, and see if we can strengthen those ties by supporting not just in our remit of health, but also by supporting education via work placements. The reward for this is not only financial (you will get a payment per student) but also in terms of staff development. This is a great opportunity for junior members of staff to gain experience in supervision and managing small projects. It's a chance for them to obtain experience with training, and,

especially for those who are still in training, to get their own competencies signed off.

By 2022 the Health and Science T Level will be available for delivery by all interested providers who meet the criteria. By 2024 it is expected that the vast majority of providers will be delivering the T Level. This is a great opportunity for our profession to rise to the challenge and help support the development of the next generation of Healthcare Scientists. ■

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With support from

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



Lab Tests Online-UK is a non-commercial website written by practising laboratory medics and scientists with lay editorial review of content to ensure its suitability. The aim of the website is to help patients and the public, including healthcare professionals, understand the many clinical laboratory tests that are used in diagnosis, monitoring and treatment of disease.

LTOL-UK fact of the month

We attend various clinical and scientific conferences every year to promote the website including the ACB UKMedLab (of course!), British Society of Haematology Scientific Meeting, IBMS Congress and the RCGP annual conference. We're always looking for volunteers to help out on the exhibition stand so contact us if you'd like to promote the site to other healthcare professionals if you're nearby!

Meet the Lab Tests Online-UK Board

**Marketing and Promotions Lead,
Rebecca Powney**



Rebecca is a Principal Clinical Scientist at Luton and Dunstable Hospital where she has worked for the past eight years. She works closely with the clinical teams throughout the Trust, acting as clinical liaison for NICU,

ITU and paediatrics, and her clinical interest is in adult and paediatric endocrinology. She is the Clinical Audit and POCT lead for Biochemistry and is interested in patient-focussed quality initiatives. No stranger to the ACB, she was the ACB Southern Region Meeting's Secretary for seven years (2012-2019) and enjoyed supporting local organisers to host scientific meetings for ACB Members and the networking opportunities these events

provided. She started her work with Lab Tests Online-UK (LTOL-UK) as the deputy Marketing and Promotions Lead but has since taken on the lead role herself. Rebecca introduced the Champion Scheme which uses the existing relationships that lab staff have with patient-facing colleagues and their access to key hospital and community locations to promote the website. Rebecca is passionate about the work of LTOL-UK and promoting the website to patients and healthcare professionals and she is always happy to talk to anyone about this. In her spare time she enjoys spending time with family and friends (now that we're allowed!), cycling and walking.

How to get involved

Join the editorial team

If you are interested in contributing to the vital work of the editorial team to keep the website up-to-date and to introduce new material, please contact us for more information. We are looking for people to edit our content, but especially on areas such as adenosine deaminase, aPTT and Warfarin Sensitivity Testing.

Become a Lab Tests Online-UK champion

Our Champions promote LTOL-UK within their local hospital or GP surgery. We're always on the lookout for people who would like to let patients know about how we can help them. If this is something that interests you, please contact us via our website or at the email address below.

Email: labtestsonlineuk@acb.org.uk Website: labtestsonline.org.uk Follow us





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The lifesaving work of Evelyn Hickmans – 70 year celebration



It is 70 years ago this month since Evelyn Hickmans, Biochemist at Birmingham Children's Hospital, helped prepare a diet to treat those with PKU – for the first time in the world. We featured this story in the December 2020 edition of *ACB News* with an announcement of Anne Green's book '*Sheila, Unlocking the treatment for PKU*'.

Evelyn Hickmans not only single-handedly established the first Paediatric Biochemistry Department in the country but was a key player in the early days of establishing the Midlands ACB as a forerunner of our national organisation. Since her book, Anne has published further articles on Evelyn Hickmans which are of great relevance to the history of our profession.

For those interested, the RSC published a full article on Evelyn in July

in its Summer newsletter – see page 26:

<https://rschg.qmul.ac.uk/Newsletter/NL2021summer.pdf>

In September 2021, *Chemistry World* highlighted Evelyn as a significant figure in the history of Clinical Chemistry in <https://www.chemistryworld.com>

A PHE blog has also just been published:

<https://phescreening.blog.gov.uk/2021/09/03/sheila-jones-pku-treatment/> ■

Photo of Evelyn Hickmans © Birmingham Children's Hospital

Save the date

ACB Scotland Autumn afternoon meeting (virtual – MS teams)

16th November 2021, 13:00-16:00

The ACB Scotland Committee would like to invite you to attend an afternoon of virtual talks exploring recent advances in the field which have potential applications in clinical practice:

- ◆ Neuron specific enolase use in prognostication of patients post cardiac arrest in ICU
- ◆ Angiogenic markers in clinical practice
- ◆ Cardiac markers in COVID-19

ACB Trent, Northern & Yorkshire (virtual – MS teams)

16th November 2021, 11:00-16:00

Full programmes for the above events to follow.

Free for ACB Members, £10.00 for Non-Members

More details will be available on the [ACB Events Calendar](#) soon.

Association of Clinical Pathologists

Chemical Pathology virtual monthly Zoom webinars 2021



Thursday 14th October 13:00-14:00

Nutrition: Nutritional concerns before and after bariatric surgery – *Dr C Le Roux*

Thursday 11th November 13:00-14:00

Parenteral nutrition – *Dr W Simpson*

If you would like to register for any of these meetings, please email Rachel Eustace at rachel@pathologists.org.uk ACP members: free of charge (conditions apply)

Non-Members: £10 per webinar or £50 for the year. ■

Publication Deadlines

To guarantee publication, please submit your article by the 1st of the preceding month (i.e. 1st November for December 2021 issue) to:

editor.acbnews@acb.org.uk

We try to be as flexible as possible and will accept articles up to the 20th 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. ■

Deacon's Challenge Revisited

No 16 - Answer

A tumour marker X is used to guide a decision on chemotherapy after the resection of the main tumour mass. The concentration decays exponentially. If the half-life of the tumour marker is less than 75 hours, then this is indicative of tumour clearance and chemotherapy is withheld. If the half-life is greater than this, it indicates that residual disease is present and chemotherapy is indicated. The precision of the assay is such that measurements can be safely made at a precisely timed interval of more than 36 hours from two or more days after surgery.

The level of X at 50 hours post surgery is 1756 ng/L and at 94 hours it is 1,050 ng/L. Calculate the half-life and indicate whether you can say with confidence whether chemotherapy needs to be given.

MRCPath, May 2000

For exponential decay:

$$C_t = C_0 e^{-K_d t}$$

Taking logs gives the linear form:

$$\log_e C_t = \log_e C_0 - K_d t$$

Where C_t = concentration at time "t"

C_0 = initial concentration (i.e. concentration when $t = 0$)

K_d = elimination rate constant.

t = time

We are given the concentrations of tumour marker at two different times:

1756 ng/L at 50 h post surgery

1050 ng/L at 94 h post surgery

These values can be substituted into the above equation to yield two simultaneous equations:

$$\log_e 1756 = \log_e C_0 - 50 K_d$$

$$\log_e 1050 = \log_e C_0 - 94 K_d$$

Subtraction of the second equation from the first eliminates the $\log_e C_0$ term, and the resulting equation can be solved for K_d :

$$\log_e 1756 - \log_e 1050 = -50 K_d - (-94 K_d)$$

$$7.47 - 6.96 = 44 K_d$$

$$K_d = \frac{7.47 - 6.96}{44} = \frac{0.51}{44} = 0.0116 \text{ h}^{-1}$$

The relationship between K_d and the half life ($t_{1/2}$) is:

$$T_{1/2} = \frac{0.693}{K_d}$$

(This relationship can be obtained by substituting $t = t_{1/2}$ and $\log_e C_t = \log_e C_0/2$ into the first order rate equation. NB $\log_e 2 = 0.693$)

$$\text{Therefore } t_{1/2} = \frac{0.693}{0.0116} = 60 \text{ h (2 sig figs)}$$

Since the half-life is less than 75 h and the time interval is 44 h and the 1st sample was taken at least 48 h after tumour removal we can conclude that chemotherapy can be withheld. ■

Question 17

A new diagnostic test has been introduced into your laboratory. Only one request for this test was received in July 1998 – in January 1999, 27 requests were received. For forward planning you need to be able to anticipate future demand.

Assuming that the increase in number of tests is exponential, what is the predicted workload for July 1999?

The Diggle Microbiology Challenge

These multiple-choice questions, set by Dr Mathew Diggle, are designed with Trainees in mind and will help with preparation for the Microbiology Part 1 FRCPATH exam.

Question 26 from August's ACB News

Which of the following statements require a true/false answer:

Viruses

- A. Contain both DNA and RNA
- B. May have an envelope
- C. Have their own metabolism
- D. May contain enzymes for replication
- E. Have a cell wall

Answers – A False, B True, C False, D True, E False

The following are DNA viruses

- A. Herpesviruses
- B. Orthomyxoviruses
- C. Enteroviruses
- D. Hepadnaviruses
- E. Parvoviruses

Answers – A True, B False, C False, D True, E True

The following are RNA viruses

- A. Picornaviruses
- B. Adenoviruses
- C. Papillomaviruses
- D. Rhabdoviruses
- E. Rotaviruses

Answers – A True, B False, C False, D True, E True

Question 27

It is possible to differentiate Salmonella from Shigella by the following:

- A. Gram stain
- B. Motility
- C. Presence of a capsule
- D. One is aerobic
- E. Shape of spore forms

The answer to Question 27 will appear in the next issue of ACB News – enjoy! ■

Time to reconnect

Rachel Wheeler, St George's Hospital

A reminder to colleagues that the deadlines are imminent for registering for two major Immunology conferences: the **British Society for Immunology Congress** (BSI Congress) is taking place on 28th November – 1st December in Edinburgh, and the biannual **UK Primary Immunodeficiency Network** (UK PIN) meeting will be held in Sheffield on 2nd-3rd November.

Both conferences offer a fantastic opportunity to connect with the wider immunology community and to learn about the latest developments, as well as meeting up with colleagues and forging new contacts. This time both events are

being held face-to-face but BSI Congress offers remote access as well. This blended approach may help to make events more accessible, particularly where people are unable to get away from work for the duration of a conference or where travel is difficult or unaffordable. It may also help presenters reach a wider audience.

Closing dates for registration are fast approaching, so have a look at the programme and hope to see you there!

The early closing date for registration for the **BSI Congress** is 22nd October 2021.

Please visit the **UKPIN** website for registration deadlines. ■



British Society for Immunology Congress 2021



📍 Edinburgh, UK

📅 Sunday, 28 November, 2021 - 00:00 to Wednesday, 1 December, 2021 - 00:00

COVID-19 sequencing . . . or, how I learned to stop worrying (sort of) and enjoy microbial genetics

Hannah Pymont (Clinical Microbiology, STP) PHE Bristol Laboratories

If you had told me in January 2020 that by May 2021 I would have been giving advice on whole genome sequencing to senior leaders in Public Health England, or that I would be able to perform viral genome analysis in the next year and a half, I would have been a bit surprised. As a trainee on the Scientist Training Programme (STP), I had been lucky to get involved with validation of the odd test, as well as some interesting clinical cases. However, like for many others, COVID-19 came along and flipped my training upside-down . . .

It started gradually; another STP (Stephanie) and I were tasked with ensuring every positive we had detected from February 2020 was sent to the COVID-19 Genomics Consortium UK (COG-UK) for sequence analysis. It soon became apparent that there was huge interest locally in sequence data, and we realised that if we could sequence our own positive samples, we could reduce turnaround times and provide more detail on infection sources and progression. This prompted a joint project with Bristol Genetics Laboratory to become a COG-UK sequencing centre. We successfully sequenced over 1200 samples in early 2021 and our expertise then fed into the development of a national initiative to put regional sequencing hubs in labs around the country.

I had several highlights from working on this project and lots of learning experiences. One that stands out was working with the Bristol Genetics



Stephanie Hutchings (back) and Hannah (right) preparing samples for SARS-CoV-2 sequencing

Laboratory team. We quickly became a tight-knit group, working in tandem and openly sharing our ideas and knowledge. Stephanie and I had little experience with the practicalities of Whole Genome Sequencing (WGS) but we could supply knowledge of the COG-UK infrastructure; the Genetics team had the bioinformatics expertise but we had the information about lineage assignment and tools to review key mutations in SARS-CoV-2. It was incredibly exciting, fast-paced and intellectually challenging (in a good way)

and I was proud to be a part of it.

I also developed my own skills in bioinformatics. With the help of those involved in COG-UK, I learned how to carry out analysis of SARS-CoV-2 sequences using various web-tools. This came in handy when Stephanie and I were asked to investigate samples from an immunocompromised patient who had been testing positive for months. I used my newfound knowledge to review any sequences that COG-UK or our local service had obtained and found that successive samples showed accumulation of mutations in the viral genome providing evidence of ongoing viral replication and evolution. This data was included in a publication detailing this patient's infection for over 300 days!¹ The article was featured at ECCMID 2021 and the patient himself became the subject of several news articles around the world for the longest recorded infection,

including a feature on BBC Breakfast.²

This project was at times exhausting and demanding but I have learned so much. It has elevated my skills as a Clinical Scientist and as a leader, so much so that I've been able to get a place on the Higher Specialist Scientist Training programme starting this year. I'm hoping to use my new-found skills to introduce next generation sequencing for other pathogens in the laboratory. I would thoroughly recommend any other Microbiology STPs out there to include microbial genetics in their training as it will become a greater part of our routine services in the future.

References

- 1 <https://www.medrxiv.org/content/10.1101/2021.05.31.21257591v1>
- 2 <https://www.bbc.co.uk/news/av/uk-57586965> ■

Taking a fresh look at acute kidney injury reporting

Anna L Barton, Principal Clinical Biochemist, Royal Cornwall Hospital; Rachel Marrington, Deputy Director, Birmingham Quality, University Hospitals Birmingham NHS Foundation Trust; William McKane, Consultant Nephrologist, Sheffield Kidney Institute, Northern General Hospital; and Martin Myers, Consultant Clinical Biochemist, Royal Preston Hospital

Acute Kidney Injury (AKI) is a common clinical syndrome with high mortality and morbidity, affecting as many as 20% of admitted patients in developed healthcare systems. The publication of the 2009 National Confidential Enquiry into Patient Outcome and Death (NCEPOD) report¹ into AKI identified significant deficiencies in AKI care in UK hospitals. A collaborative group of interested professionals, termed “Think Kidneys”, was formed to provide focus and direction for Quality Improvement (QI) in AKI care.²

A subsequent NHS England National Patient Safety Alert in June 2014 mandated all acute trusts to implement AKI electronic alerts using a standardised algorithm.³ Laboratories implemented AKI reporting and provided AKI data to the UK Renal Registry (UKRR). By 2018, 87% of laboratories were returning data to UKRR. In 2020 the UKRR issued the first report based on 564,738 AKI episodes, producing a national epidemiological picture of AKI.⁴

Unwarranted variation

The national Getting It Right First Time (GIRFT) programme includes multiple specialist interest groups, with AKI being covered by three of them; Renal Medicine, Pathology and Acute Medicine. Renal GIRFT collated a plethora of data from the UKRR, Hospital Episodes Statistics (HES) and the Office for National Statistics (ONS) to produce case mix-adjusted metrics on

mortality, length of stay and re-admission after AKI. These sources showed significant variation. This could be partly explained by care quality factors, but there is also evidence that HES significantly underestimate AKI incidence. Pathology GIRFT have demonstrated a 3 to 5-fold variation in the incidence of AKI 1, 2 and 3 both within Emergency Departments and in Primary Care.⁵ Deep dives into the data found no obvious explanation for this unwarranted variation, raising questions about methodological differences (for example, with or without mild haemolysis) and differences in the AKI algorithm being used. This was further brought into focus by the discovery that one of the main LIMS suppliers had not adopted the NHS AKI algorithm at implementation.

This finding resulted in a collaboration between GIRFT, ACB, UK NEQAS and the UK Kidney Association (UKKA) to form an AKI task-force. The AKI Task-Force was comprised of the following members:

- ◆ Neil Anderson – ACB Past President
- ◆ Alexandra Yates – Director of Scientific Affairs for the ACB
- ◆ Anna Barton – ACB Scientific Affairs and Clinical Practice (SACP) Committee member, and ACB representative to the UKKA AKI specialist interest group
- ◆ Martin Myers – GIRFT Senior Clinical Advisor
- ◆ Finlay MacKenzie and Rachel Marrington – Director and Deputy

Director of UK NEQAS, Birmingham

- ◆ William McKane, Nicolas Selby and James Medcalf – Consultant Nephrologists, and members of the UKKA AKI Specialist Interest Group.

The first meeting was held in May 2021. The aim of the taskforce is to investigate and improve the understanding of variation in AKI reporting and implement solutions, by undertaking a National AKI audit and introducing a new AKI EQA scheme.

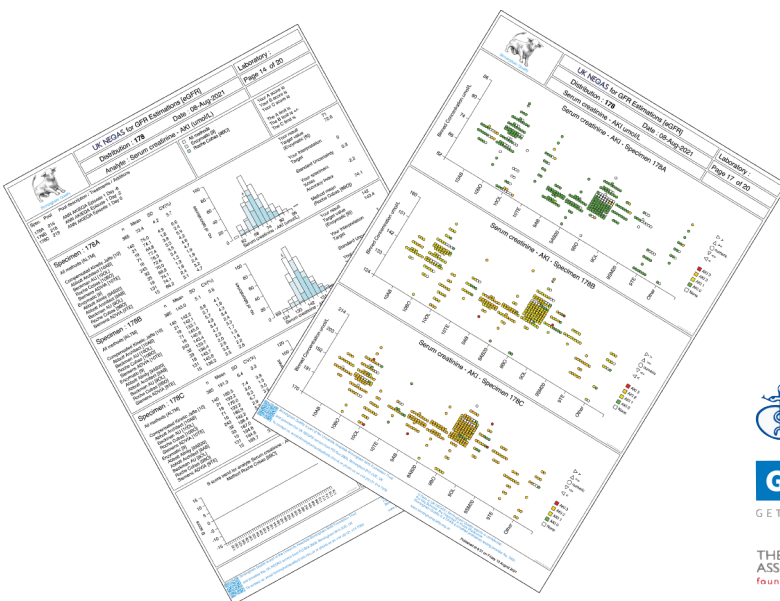
The national AKI audit

The initial task was to gather in-depth information on the performance of AKI reporting. Only then could we start to tease out minor and major problems or identify areas that required further in-depth inspection. We were keen to look at the whole pathway, not just the AKI reporting itself and therefore we asked questions on the very initial stage; the analysis of creatinine. We asked for information on the specific assays used, which creatinine results were passed through the algorithm (primary and/or secondary care), or excluded (e.g. dialysis

patients) and minimum age. Likewise, we asked questions about the IT system used to hold the AKI algorithm, the actual algorithm used, its validation and maintenance. Lastly, we asked how the AKI outcome was reported, including any comments and if results were also telephoned or emailed. The audit was distributed in August via the ACB, UK NEQAS and the UKKA, and closed in September. The AKI task force will collate and scrutinize the data. It is hoped that the results of the audit will provide clarity on the integrity of AKI reporting and point to areas that require attention. A national report will be collated and any recommendations that arise will be implemented on a national basis with full support from the ACB, GIRFT, UK NEQAS and UKKA.

The new AKI EQA scheme

AKI is a derived test, with the result derived from a current creatinine result compared to historical creatinine results via the AKI algorithm. Consequently, the calculation of AKI is inherently complex and open to multiple sources of



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 THE RENAL
ASSOCIATION
founded 1950

 UK NEQAS
Clinical Chemistry

variation from each individual creatinine result used. This includes any sources of error that impacted those individual results on the day of reporting (e.g. patient, phlebotomy, transport/storage, and analytical issues), and the integrity of the AKI algorithm itself. It is known that all calculated tests have limited quality control, with any quality assessment usually restricted to the initial validation of the equation. Internal Quality Control (IQC) only allows monitoring of the analysed parameter(s), and External Quality Assessment (EQA), if available for the calculated test, is usually performed monthly. Laboratories should have robust change control procedures when any adjustments are made to IT systems; however, the changes may not always be within the laboratory's control. Even if the change may not directly impact the calculation, any update to the system may cause adverse events which could go unnoticed for a significant amount of time, if at all.

In August 2021, Birmingham Quality launched an EQA Scheme for AKI as part of the extended UK NEQAS for Acute and Chronic Kidney Disease (formally just for eGFR) Scheme. This EQA programme assesses the quality of the whole laboratory process. Every month, three serum specimens are provided for a dummy AKI-EQA patient, with each sample having a different sample collection date. Laboratories analyse the samples in chronological order for creatinine and both the creatinine and AKI outcome are reported. For the duration of the Pilot, four dummy AKI-EQA patients (three adults and one child) are required to be set up and are only used for this scheme to ensure purity of creatinine historical data. The same patient may be

used over multiple distributions, allowing historical creatinine data to be accumulated over many months and for the algorithm to be tested on its use of creatinine data in both the near term (days/weeks) and the long term (months/years). The AKI EQA not only assesses the AKI calculation; it also assesses the analytical variation of creatinine. Hence, it is recommended each individual analyser within the laboratory is set up with the scheme. Consequently, individual analyser creatinine variation and the impact on AKI can be assessed.

Even after only a couple of distributions, the data is already showing interesting results and has succeeded in getting people to think more about AKI, the impact of creatinine analytical variation, AKI algorithm integrity and, most importantly, the impact of the AKI report on the patient. For further information on this scheme please contact birminghamquality@uhb.nhs.uk

The future

AKI and the factors that affect its calculation and reporting are firmly on our radar. We thank you for all your help with completing the AKI audit and for taking part in the AKI EQA scheme; the findings of both will be published. Thank you for your hard work and the data you provide, as it will help shape the improvement of AKI reporting and benefit our patients.

References

- 1 https://www.ncepod.org.uk/2009report1/Downloads/AKI_report.pdf
- 2 <https://www.thinkkidneys.nhs.uk/aki/>
- 3 <https://www.england.nhs.uk/akiprogramme/aki-algorithm/>
- 4 <https://ukkidney.org/resource/aki-report>
- 5 <https://www.gettingitrightfirsttime.co.uk/girt-reports/>

Cyril Weinkove

17th April 1938 – 14th July 2021

Cyril Weinkove died suddenly on 14th July 2021, following a period of ill health that began in Autumn 2020.

Cyril graduated in Medicine from the University of Cape Town, South Africa in 1963 and was awarded his PhD in 1974. He came to the UK with his wife Liza in 1974, working initially as a locum in Willesborough Hospital in Kent. In January 1975, he obtained a Senior Registrar post, rotating between the Royal Berkshire Hospital, Reading and Charing Cross Hospital, London. In 1978, he was appointed Senior Lecturer and Honorary Consultant Chemical Pathologist in the University of Manchester Department of Chemical Pathology based in Hope Hospital, Salford (now named Salford Royal NHS Foundation Trust), where he stayed for the rest of his career. He was delighted, following his retirement, to be awarded Fellow Membership of the Association for Clinical Biochemistry (ACB) in recognition of his contributions to the specialty.

Everyone who worked with Cyril will remember his friendliness, approachability, fondness for a joke and light-hearted approach to life in general. This belied an underlying sharp intellect, far-sightedness in his specialist field and determination when he saw an unmet clinical need. If confronted with anything he regarded as a needless barrier to change, he would say, "Show me a system and I will find a way round it!". His approach bore fruit. Recognising limitations in the reliability of diagnostic tests for phaeochromocytoma, he simply decided to set up and offer a quality assurance scheme for catecholamine and metadrenaline measurement. When Dr Russell Ead (Consultant Dermatologist) said he had an



interest in cutaneous porphyria, Cyril instigated a series of MSc and PhD projects for students investigating haem biosynthetic enzymes and quantitative methods for porphyrins and their precursors. The analytical service developed from this research led ultimately to Salford Royal becoming a Regional Specialist Clinical Biochemistry service for all forms of porphyria. He was ahead of his time in setting up Salford's lipid clinic, well before the "statin" era, and in the face of scepticism towards medically-led weight management, he started an early obesity clinic offering supervised very low-calorie diet treatment. Cyril was an "early adopter" of digital technological solutions. "I hate paper", he would groan at the sight of piles of it on his desk, and delightedly explained the joys of sending emails to his son in the

USA before most colleagues had ever sent or received one.

His lectures and teaching were fun and effective, filled with simple messages such as, "What should your cholesterol be?" The answer to this of course being "Lower!" He also used props, such as Pontefract Cakes, offered as a reminder of unusual causes of electrolyte disturbance. Irreverence (always kindly meant) was another trademark that could bring the house down. In a national ACB lecture, he memorably likened noradrenaline to an eminent and famous professor in the audience as "small, ubiquitous, very powerful and sometimes gets on your nerves"!

Cyril was a cultured, musical man. He found two neglected pianos in the hospital, paid to have them repaired, tuned regularly and set up in rooms where they could be used. He encouraged

colleagues of all abilities to play together and organised concert groups.

In his retirement, one particular joy was to play bass clarinet in the Crumpsall Concert Band and entertain his many long-standing friends in musical evenings at home.

Cyril and Liza had three sons, to whom they passed on many talents – Robert (haematologist), Ben (academic mathematician) and Andrew (computer programmer). He was immensely proud of them all.

During his retirement he married Liz, with whom he hosted regular barbecues for friends and prior colleagues and who cared for him devotedly during his illness and COVID-enforced separation from the company he so loved. Cyril will be greatly missed by all his immediate and wider family, friends and former colleagues. ■

F.S.

Mr Frank Finlay

Frank Finlay, a Consultant Clinical Scientist from Glasgow, sadly died aged 64 on Sunday 19th September after a long illness.

Frank started his career as a basic grade Biochemist in Frimley Park District General Hospital, Surrey, in 1979. Having successfully completed his MSc in Clinical Biochemistry at Surrey University, he moved back to Scotland to the Southern General Hospital, Glasgow, as a Senior Grade Clinical Scientist in 1983. Frank remained at the Southern General Hospital, now Queen Elizabeth University Hospital, as Principal Clinical Biochemist until the early 1990s when he took up the post of Consultant Clinical Biochemist. Frank held that post until his retirement in 2019. Throughout his career he made a significant contribution to the field of Clinical Biochemistry promoting research, audit and service development in addition to training, mentoring and supporting many of the biochemists around Scotland and beyond.

He was an active member of the ACB, serving on the committees in various roles including Treasurer and Regional Member. During his career, Frank was also a member of the Scottish Regional Council for the Royal College of Pathologists.



His expertise in IT led to roles within local and regional committees including the Scottish Clinical Biochemistry Network.

Above all, he will be remembered fondly by all who knew him and had the pleasure of working beside him. Frank will be sadly missed by his family, friends and former colleagues.

A time for reflection.

J.M.

Industry Insights: October 2021

Doris-Ann Williams, Chief Executive, BIVDA



The first two months of autumn have been exceptionally busy for BIVDA and its members. COVID-19 continues to use a lot of our time and this has been added to by the requirement for a desk top validation for COVID-19 antigen and molecular tests, in addition to a CE mark. There will probably be an additional technical validation required also, a consultation was still open as I wrote this column.

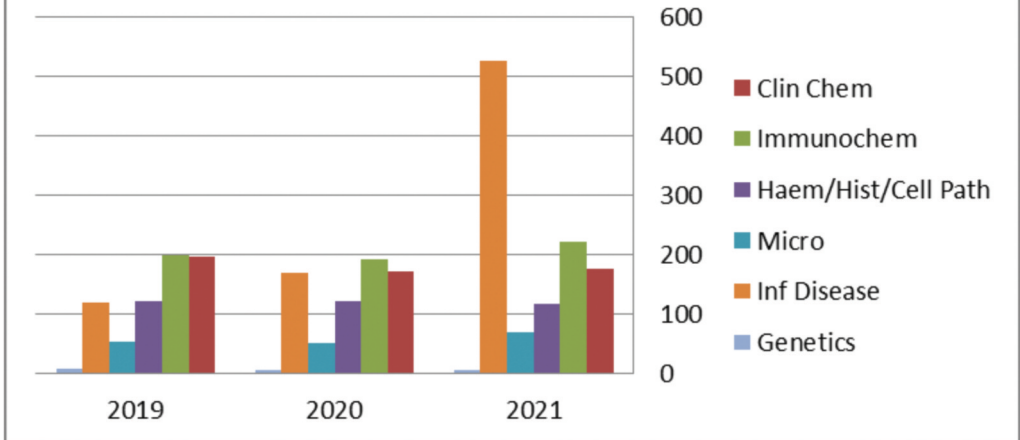
BIVDA has started to hold some face-to-face meetings again, notably with a procurement meeting in mid-September with a first sustainability workshop afterwards. Procurement was a blended meeting with some delegates attending virtually and we will be offering this whenever possible for the foreseeable future. With a workshop style event, a blended meeting is more difficult to manage although no doubt we will find ways to enable this as our expertise increases! Sustainability is a new initiative for BIVDA and something our members take very seriously so we expect to engage more with our lab colleagues on this in the future.

The MHRA have also launched their consultation on the future regulations for medical devices and IVDs in the UK – this will close on 25th November, but it is a large document which will affect the NHS as well, so I recommend you looking at it and I hope the ACB will be responding. As an industry we are hoping it will keep us aligned with the IVD Regulation coming into force in the EU as MHRA were heavily involved in writing the EU regulation and industry already have a big burden to carry in regulation around the world, especially for UK SMEs. However, we remain conscious of the primary reason for regulation which is to maintain patient safety. There will certainly be plenty to cover in our annual two-day seminar in Liverpool this month!

We have also been contributing to the development of a diagnostics strategy to support the DHSC in the request for funding from the comprehensive spending review in the late autumn. This is an area where the pandemic has shown a positive effect in highlighting the underinvestment over many years in diagnostic services and the diagnostic workforce. The intention for this was to be a case for investment to Treasury but a published policy would be also good to see and BIVDA has been calling for better infrastructure including dedicated diagnostic roles in Government.

You will all have been acutely aware of the effects of the shortage of blood collection tubes and the impact this will have had on starting to reduce the backlog of patients needing tests. Our most recent market intelligence report (June 2021) clearly shows the

IVD Market Revenues UK (£m) 12 months July_June



dramatic but unsurprising increase in infectious disease products sales in the preceding 12 months.

The lockdown caused a near-suspension of routine diagnostic services, leading to drops in these testing figures. However, various other specific tests did show an increase, as the need arose for monitoring and diagnosing the complications of a COVID-19 infection, and to differentiate it from other respiratory infections.

The graph shows the impact by testing area (based on sales from a rolling year

June to June). It should be noted that these numbers do not take into account glucose self-testing or the Government's contracts for Lateral Flow Tests (LFTs) that were awarded to non-BIVDA member companies.

It seems unbelievable that next time I write we will be at the end of 2021 and I hope I will be able to look by then to a more stable year ahead of us in 2022 as the uncertainty we have had over the last two years has been such a stressful and difficult time for us all. ■

ACB News Crossword

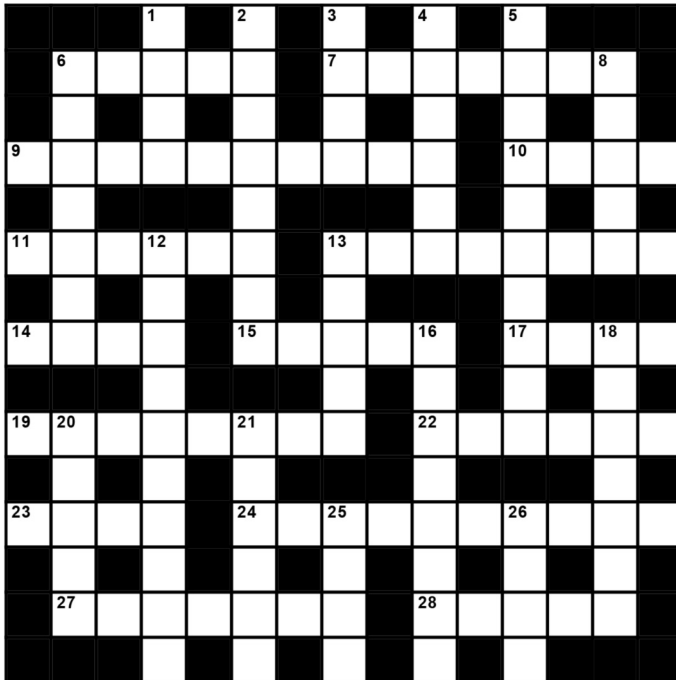
Set by Rugosa

Across

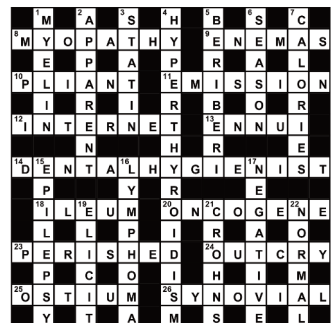
- 6 Aroma of first mincepies in market (5)
 7 Cut back some ground elder (on gibberellin?) (7)
 9 Endocrine disturbance surprisingly calmer with yoga (10)
 10 Car for parliamentary candidate? (4)
 11 Bacterial growth found before a list ended surgery (6)
 13 In the room when something important is 7 (8)
 14 Period name (4)
 15 Leaves extremists without terms (5)
 17 Investigate intestinal content (4)
 19 Questionable legal separation, missing note is a serious deficiency (8)
 22 Substitutes last item held in place (6)
 23 Long inaugural lecture held group back (4)
 24 Fitting point of view: one 20 has such an inclination to floor (5,5)
 27 Our way to measure bird speed? (7)
 28 Arrange US lab request? (5)

Down

- 1 Some enzyme molecules of note (4)
 2 Stevenson character going after corrupt deal for chemical group (8)
 3 Component of biochemical insulator (4)
 4 Biochemical confused enemy about impedance (6)
 5 Richest opt out for body part replacement (10)
 6 Endless course about carbohydrate (7)
 8 Some back in main ward look strained (5)
 12 Mislaid tool used to determine particle numbers in 16 down (10)
 13 Type of 17 central to caramelisations (5)
 16 Answer is to avoid can't during difficult consultation (8)
 18 Omit check of new relativism for being little different (7)
 20 Vertical construct (5)
 21 Language largely to the point, but losing one (6)
 25 Lady Jane's mount? (4)
 26 Lymphatic system component in immunodeficiency (4)



Solution for August Crossword



ACB News

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