Clinical Biochemistry





News

September 2025

Newsletter of the Association of Clinical Biochemists in Ireland

and the Association for Laboratory Medicine (Republic of Ireland Region)



Henry Marsh CBE is a neurosurgeon born in Oxford in 1950. He initially studied Politics, Philosophy and Economics at the University of Oxford before studying Medicine at the Royal Free Medical School in London, graduating in 1979. He subsequently specialised in neurosurgery and pioneered the technique of 'open craniotomy', in which patients are kept awake and conscious during brain surgery, significantly reducing the risk of damaging brain functions. He has written three books for the general public. Inside on pages 11-13 Peadar McGing reviews his first book, *Do No Harm: Stories of Life, Death, and Brain Surgery* and recounts lectures Mr. Marsh gave in the Mater Hospital in 2016 and 2025.

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Editors: Dr. Martin Healy; Dr. Peadar McGing

President's Update: ACBI Forum, Annual Conference and Member Highlights 2025

★ At-a-Glance

• ACBI Forum (CPD Day)

Friday, 12 September 2025

Montpelier Suite, Ashling Hotel, Dublin 8

5 RCPath CPD credits

• 47th Annual ACB Conference

Friday-Saturday, 14–15 November 2025

Hodson Bay Hotel, Athlone

9 RCPath CPD credits

1) ACBI Forum - CPD Day (12 September 2025)

The ACBI Forum offers a stimulating CPD programme with sessions on CORU regulation, patient and public involvement, ethics in research, social media in healthcare, kidney stone services, biomarker research (BAMBI), and communication.

RCPath CPD: 5 credits

2) 47th Annual ACBI Conference (14–15 November 2025)

Our 47th Annual ACBI Conference will focus on Biochemistry in Neonates and Childhood. Highlights include:

- Ten-year review of cystic fibrosis newborn screening
- Advances in paediatric liver and metabolic disorders
- Neonatal biomarkers and cerebral palsy outcomes
- Steroid metabolism investigations (USP approach)
- Inclusion health in paediatric settings
- Patient-centric sampling perspectives
- Launch of the updated Biochemistry of Body Fluids booklet
- Sustainability in laboratory practice, with poster prizes for impactful green initiatives

RCPath CPD: 9 credits

3) Recent Publications & Contributions

This edition of Clinical Biochemistry News contains details of a selection of papers produced recently by ACBI members. Congratulations to Dr Jennifer Brady, Eileen Byrne, Dr Sean Costelloe, David Green, Dr Caroline Joyce, Dr. Mark Kilbane, Dr Graham Lee, Micheál Mac Aogáin, Jessica Neville, Niamh O'Connor, Dr Paula M. O'Shea, and Jennifer Russell on their publications.

Dr Peadar McGing is co-author of the new *Biochemistry of Body Fluids* chapter in the soon to be published 8th edition of *Tietz Textbook of Laboratory Medicine*.

Clinical Trials

Dr Graham Lee & Dr Paula M. O'Shea Active collaborators in major trial networks:

- * Diabetes Collaborative Clinical Trial Network
- * EMERGE Trial
- * Bump2Baby

National Adult Nutrition Survey II (NANSII)

Dr Caroline Joyce

Active in the INFANT Pregnancy Loss Research Group, focusing on biomarker discovery for rare and pregnancy-related disorders

Guideline Leadership

Dr Caroline Joyce — Biochemical Genetics

Member of the:

- National Genetics & Genomics Office Testing Guidance Working Group
- Expert Advisory Group for Maternity & Gynaecology Clinical Guidelines
- Co-author of HSE's Gestational Trophoblastic Disease Guideline, and member of the NCCP Steering Committee.

Dr Paula M. O'Shea & Eileen Byrne

Members of the:

• NPT Consultative Group, currently contributing to the update of the 2022 National NPT Guidelines.

Dr. Peadar McGing

• Leading a team of biochemists in updating the ACBI Fluid Guidelines. The team includes Dr. Paula O'Shea, Eileen Byrne, Micheál Ryan, Dr. Martin Healy, Karen Heverin, Carl Talbot, Dr. Mark Kilbane, and Dr. Janice Reeve.

4) Irish Representation on EFLM Working Groups

- Dr Jennifer Brady Direct-to-Patient Testing
- Dr Graham Lee Nitrous Oxide (testing/clinical impact)
- Dr Sean Costelloe Pre-analytical Phase

5) Congratulations — FRCPath Trainees

We are proud to recognise the outstanding progress of our trainees.

Wendy Groenendijk - successfully passed Part 1 of the FRCPath examination and is now eligible to use the postnominals DipRCPath, as designated by the College upon achievement of Part 1

Clodagh Kivlehan - has successfully completed Part 1 and the Management component of Part 2.

These milestones reflect the modular progression of the FRCPath pathway and mark important steps toward ultimate Fellowship. Their dedication exemplifies the future strength of clinical biochemistry in Ireland.

6) Congratulations to Dr. Caroline Joyce on her appointment as Adjunct Clinical Lecturer at UCC.

Looking Ahead

With the Forum in September and the Conference in November, 2025 promises to be a year of professional growth, collaboration, and recognition of member achievements.

Dr. Paula O'Shea, President of the Association of Clinical Biochemists in Ireland

Some new publications by ACBI members

Dunne F, Newman C, Alvarez-Iglesias A, **O'Shea P**, Devane D, Gillespie P, Egan A, O'Donnell M, Smyth A. *Postnatal Cardiometabolic Health After Metformin Use in Gestational Diabetes: A Secondary Analysis of the EMERGE Trial. J Clin Endocrinol Metab.* 2025;110(5):e1566–e1572. doi:10.1210/clinem/dgae522.

Joyce CM, Maher GJ, Dineen S, Suraweera N, McCarthy TV, Coulter J, O'Donoghue K, Seckl MJ, Fitzgerald B. *Morphology combined with HER2 D-DISH ploidy analysis to diagnose partial hydatidiform mole: an evaluation audit using molecular genotyping. J Clin Pathol.* 2025;78(5):327–334. doi:10.1136/jcp-2023-209269.

Joyce CM, Dineen S, Deane J, Conlon N, **O'Shea PM**, Corcoran P, Coulter J, O'Donoghue K, Fitzgerald B. *Novel scoring system provides high separation of diploidy and triploidy to aid partial hydatidiform mole diagnosis: an adaptation of HER2 D-DISH for ploidy analysis. J Clin Pathol. 2025;78(5):320–326. doi:10.1136/jcp-2023-209265.*



47th Annual Conference of the Association of Clinical Biochemists in Ireland



Friday 14th-Saturday 15th November 2025

Hodson Bay Hotel, Athlone, Co. Westmeath

Dr Jennifer Brady, Chair, ACBI 47 Conference Organising Committee 2025

Preparations are well under way for this year's 47th annual conference. Last year the theme was laboratory medicine for the older person, and this year we are moving to the other end of the age spectrum with a focus on paediatrics from neonates to adolescents. Whether or not you are working in a hospital that handles neonatal or paediatric samples, we have a fantastic line up of speakers with plenty to interest everyone.

Some highlights of the programme include Dr Ann Bowron, who is an extremely experienced clinical scientist working in the metabolic laboratory service in Newcastle. Dr Bowron is a member of the SSIEM education and training faculty and will be talking us through what to look out for in routine biochemistry results that may raise a suspicion for an inherited metabolic disorder. These can present at any age, including in adults and we must all be mindful of these individually rare, but collectively common conditions when reviewing biochemistry results.

Later on Friday we have a session on the investigation of ambiguous genitalia delivered by Dr Colin Hawkes, a consultant Endocrinologist from Cork University Hospital. These can be highly complex conditions requiring a large multi-disciplinary team in which clinical biochemists play an important role. This topic will be complemented by a presentation from Dr David Taylor, consultant clinical scientist from King's College Hospital in London who will discuss the powerful tool of urine steroid profiling in diagnosing disorders of steroid metabolism.

On Saturday we will hear about novel approaches to paediatrics, with Prof Deirdre Murray talking about her research into novel biomarkers of brain injury in neonates, followed by Dr Tim Lang discussing emerging technologies in paediatric laboratory medicine. Dr Lang is a member of the IFCC committee on this topic so is at the leading edge of developments in this area.

Our final session will discuss how we can provide a holistic healthcare approach to the more vulnerable members of society. Specialist multidisciplinary inclusion health clinics are being developed around the country and we will hear from Dr Siobhán Neville about her experience in setting up a service in Limerick. From a laboratory perspective obtaining blood samples from patients who have significant disabilities or vulnerabilities can be extremely challenging. Dr Karen Perkins, consultant clinical scientist from Wolverhampton, will talk to us about her work in this area. Dr Perkins has been a leading advocate for patient centric sampling in the UK and organised a meeting in February which brought together the many stakeholders in the area of patient centric sampling to discuss everything from sampling devices, laboratory accreditation, industry and patient perspectives. We hope that by sharing her experience Karen will give us some food for thought to develop blood collection services outside of traditional phlebotomy which will support our vulnerable patients.

As laboratory scientists we have a responsibility to reduce the impact of our diagnostic services on the planet. Dr Rob Shorten, will share his experience of implementing Greenlab improvements in his laboratory. Don't forget to check out the Green Lab resources page in the members area of the website for ideas!

Research and innovation is fundamental to the role of the clinical biochemist and there are many sources of funding available these days including the SPARK innovation fund. Dr Siobhán Power will outline the purpose of this funding and how it can be accessed.

We are now in the 47th year of hosting our annual conference and we have all the old favourites that you have come to expect including poster presentations, networking opportunities with colleagues, friends and industry partners and a wonderful conference banquet on Friday night. This year we have a few new items including 2 prizes of 100 euro each for the best poster presentations that relate to GreenLabs and we will be asking delegates to vote for the best clinical case poster. So whether this is your first ACBI conference or you have lost count of how many you have attended, we look forward to seeing you in Athlone!

47th ACBI ANNUAL CONFERENCE PROGRAMME

DAY 1 Friday 14th November 2025

09:00 - 09:30

Arrival and Registration

09:30 - 09:40

Opening Remarks – Dr Paula O'Shea, ACBI President

Session 1 Chairs Dr Maria Fitzgibbon, Wendy Gronendijk

09:40 - 10:20

Dr Barry Linnane, Consultant paediatric respiratory physician, UHL

Ten year review of CF Newborn Screening in Ireland

10:20 - 11:00

Dr Emer Fitzpatrick, Consultant paediatric gastroenterologist, Children's Health Ireland.

Updates in paediatric liver disease (tbc)

11:00 - 11:40 Tea/Coffee and poster viewing

Session 2 Chair: Dr Paula O'Shea

11:40 - 12:20

Dr Ann Bowron, Consultant Clinical Scientist, Newcastle

Routine Biochemistry Investigations in the Diagnosis of Inherited Metabolic Disease

12:20 - 13:00

Oral presentations from abstracts (x3)

13:00 – 14:15 Lunch and poster viewing

Session 3 Chair: Dr Brendan Byrne

14:15 - 14:35

Dr Peadar McGing – Launch of the updated ACBI booklet 'The Biochemistry of Body Fluids'

14:35 - 15:15

Dr Robert Shorten, Consultant Clinical Scientist, Lancashire Teaching Hospitals

Climate change and the laboratory (tbc)

15:15 - 15:55

Dr Siobhán Power, National HSCP Innovation fellow, HSE Spark Innovation Programme

The HSE Spark Innovation programme (tbc)

15:55 – 16:30 Tea/Coffee and poster viewing

Session 4 Chair: TBC

16:30 - 17:10

Professor Colin Hawkes, Consultant Paediatric Endocrinologist, Cork University Hospital

A stepwise diagnostic approach to the child with ambiguous genitalia

17:10 - 17:50

Dr David Taylor, Consultant Clinical Scientist, Director, SAS Urine Steroid Profiling Laboratory, King's

College hospital, London.

Clinical utility and interpretation of urinary steroid profiles in Paediatric Endocrinology

17:50 - 17:55

Day 1 close

DAY 2 Saturday 15th November 2025

Session 5 Chairs Dr Graham Lee, Dr David Green

09:35 - 10:15

Professor Deirdre Murray, Consultant Paediatrician, Cork University Hospital

Biochemical markers for newborn brain injury and cerebral palsy: state of the art in 2025

10:15 - 10:55

Dr Tim Lang, Consultant Clinical Scientist, Newcastle

Emerging technologies in paediatric laboratory medicine

10:55 – 11:30 Tea/Coffee and poster viewing

Session 6 Chairs TBC

11:30 - 12:10

Dr Siobhan Neville, Consultant Paediatrician, UHL

Inclusion health (tbc)

12:10 - 12:50

Dr Karen Perkins, Principal Clinical Scientist, University Hospitals of Morecambe Bay NHS Foundation Trust Patient Centric Sampling – experience from a laboratory perspective

12.50 - 13:20

Oral presentation from abstracts (x3)

13:20 - 13:30

Medal/Awards – Dr Paula O'Shea, ACBI President.

13:30 - 13:40

Early bird registration deadline: September 1st

Abstract submission deadline: 5 pm September 12th

Venue: Hodson Bay Hotel, Co. Roscommon. For room bookings contact the hotel directly at 353 (0) 90 644 2004. email: info@hodsonbayhotel.com. Mention that you are attending the conference. Delegate rate is €170 per single room B&B. This rate is available until 5 pm on the 15th of October.

Registration and ticket pricing details can be found at www.acbi.ie/events



Hodson Bay Hotel

Latitude: 53.468528, Longitude: -7.988867

Pauline O'Gorman - An Appreciation



Pauline O'Gorman, Principal Clinical Biochemist (retired), who passed away 24th of February 2025, was synonymous with St Vincent's University Hospital Clinical Biochemistry Department for over 40 years.

Pauline obtained her degree in Biochemistry from University College Dublin and began working in St. Vincent's Hospital Biochemistry Department in 1961. At that time, the hospital was situated on St Stephen's Green, with convenient access for staff to shops, cafes and the park. Test methodologies at the time were very labour intensive; examples of these were heating Folin-Wu reagent in test tubes for blood glucose estimation and measurement of serum chloride by titration. In 1969-70 St. Vincent's Hospital moved to the Elm Park modern site with new **Biochemistry** Laboratory facilities. Pauline's career spanned a period during which there were very many changes in technology and a huge increase in the number of tests performed and the range of diagnostic tests provided. Pauline had an excellent understanding of methodology underlying test and the

scientific principles. One of her early interests was in the evaluation of serum enzyme tests and their introduction into the laboratory service as diagnostic markers. Pauline was among the first biochemists to undertake and complete the challenging MSc in Clinical Biochemistry at Trinity College Dublin. As part of this MSc, she submitted a dissertation on serum pancreatic enzymes, in collaboration with Kevin McGeeney of the Department of Medicine, Woodview, UCD. Another of her interests was in cholesterol and lipid tests and she collaborated in lipid research with Professor Noel Hickey. She also developed great performance expertise in the and interpretation of protein electrophoresis

She set a very high standard in terms of quality, not only the accuracy of test results per se, but also in relation to their clinical interpretation. She had a great rapport with the G.P.s in the catchment area and knew their areas of interest from frequent phone calls to report and discuss results. Pauline made a huge contribution to patient care through her attention to quality and detail.

Following the retirement of Marion Doolin as Consultant Biochemist in 1992, Pauline acted as Head of Department for the next three years. During this period she led and inspired the Biochemistry staff in providing a high quality service. Despite this, Pauline was very modest about her achievements. On a personal note, when I then became Consultant Clinical Biochemist, Pauline was very welcoming to me. Her knowledge, experience and wise advice were invaluable and I really appreciated her help and support then and over the following years.

Pauline retired officially in 2002, but

remained involved in the laboratory through periodic short-term contracts until 2006. When she retired, all the staff greatly missed her warm presence and her knowledge and expertise, which she had accumulated over so many years.

A member of the Association of Clinical Biochemists in Ireland (ACBI) for decades, she was a regular attendee at scientific conferences, where she kept in touch with colleagues from other hospitals. She maintained her interest in clinical biochemistry and medicine and continued to attend conferences long after her retirement.

Pauline was a very warm, gracious person, who got on very well with people. She was very kind and patient with trainee and junior staff. She was held in high esteem by all her staff for her knowledge and helpfulness.

She was devoted to her family and returned to Monaghan most weekends to spend time with her parents. She was also very close to her brothers, their wives, her nieces and nephews and their families. Pauline kept in touch with and very much enjoyed meeting regularly with a group of former Biochemistry SVUH staff called "The Conrad Girls," named after the venue where they usually met.

In earlier years, Pauline loved holiday life in France. Cycling holidays in Ireland with family were also holiday highlights, and she especially loved Connemara. Her other interests included art and music, especially opera, and she was a frequent visitor to the National Gallery and the National Concert Hall.

Pauline was known for her kind, gentle and friendly nature. She was a wonderful colleague and friend who is greatly missed by all who knew her.

-Dr. Sean Cunningham



A Selection of Members' Recent Publications

Prenatal maternal cortisol, stress and anxiety, and childhood obesity at 5 years: a nested case-control study. Matvienko-Sikar K, Butler E, Keeffe LO, Dijk WV, Hayes CB, Huizink AC, Kearney PM, **Costelloe SJ**, Curtin S, **Foley K**, McCarthy FP, Mahony SO, Khashan A, Murray DM. J Reprod Infant Psychol. 2025 Jul;43 (4):831-845. doi:

10.1080/02646838.2023.2288298. Free Article

Use of the Abbott i-STAT®1 point of care device for hCG quantification in early pregnancy. Joyce C, O'Shea PM, Lynch R, Costelloe SJ, McCarthy TV, Coulter J, Hayes-Ryan D, O'Donoghue K. Int J Gynaecol Obstet. 2025 May 19. doi: 10.1002/ijgo.70217. Free article

Commentary on Secondary Amenorrhea and Clinical Hyperandrogenism in a 34-Year-Old Female: Polycystic Ovary Syndrome or Not? **Lee GR.** Clin Chem. 2025 May 2;71(5):546. doi: 10.1093/clinchem/hyae224.

A method comparison of the Roche intact PTH method versus the Roche whole PTH (1-84) method: Examining the differences based on eGFR. **Byrne E**, Twomey PJ, Crowley RK, McKenna MJ, **Kilbane M**. Ann Clin Biochem. 2025 Jun 23:45632251356826. doi: 10.1177/00045632251356826.

Clinical and Developmental Outcomes After 50 Years of Newborn Bloodspot Screening for Classical Galactosaemia in the Republic of Ireland. Pereira D, Loftus E, Thompson CE, Boyle F, McNulty J, Boruah R, Crushell E, Howard C, Hughes J, Monavari AA, Treacy EP, Beegan A, Jordan N, Rogers Y, Collins A, **Brady JJ**, Elsammak M, Mayne PD, Knerr I. JIMD Rep. 2025 May 26;66(3):e70022. doi: 10.1002/jmd2.70022. Free article

Point-of-care procalcitonin trends in suspected neonatal late-onset infection: a prospective observational study. Armstrong SJ, **Brady JJ**, Drew RJ, Foran A. Pediatr Res. 2025 May;97 (6):1958-1965. doi: 10.1038/s41390-024-03670-x.

Impact of changes in gestational diabetes mellitus diagnostic criteria during the COVID-19 pandemic. **Neville J**, Foley K, Lacey S,

Tuthill A, Kgosidialwa O, O'Riordan M, O'Halloran F, **Costelloe SJ**. Ir J Med Sci. 2025 Jun;194(3):1097-1104. doi: 10.1007/s11845-025-03926-3. Free article

Cost effectiveness of early metformin in addition to usual care in the reduction of gestational diabetes mellitus effects (EMERGE)-A randomised placebo-controlled clinical trial. Gillespie P, Mahon R, Newman C, Alvarez-Iglesias A, Ferguson J, Smyth A, O'Shea P, Devane D, Egan A, O'Donnell M, Dunne F. Diabet Med. 2025 Jun;42(6):e70036. doi: 10.1111/dme.70036. Free article

Longitudinal SARS-CoV-2 antibody response in a healthcare worker cohort utilising the Abbott Alinity® anti-nucleocapsid assay. Connolly SP, Garcia Leon A, Green S, McGee D, Duggan P, Browne R, Miles S, Negi R, Alalwan D, Natin D, Mallon PW, O'Gorman P, Lee G, Green D, McGinty T, Cotter AG. PLoS One. 2025 Jun 11;20(6):e0325544. Free article

The patient perspective on use of Omalizumab in the in-hospital setting. Dungan L, Little F, **O'Connor N**, Cox F. Ir J Med Sci. 2025 Jun;194(3):793-795. doi: 10.1007/s11845-025-03978-5. Free article

Beyond ORBIT: Mapping the Constellation of Pseudomonas Endotypes in Bronchiectasis Clinical Trials. **Mac Aogáin M.** Am J Respir Crit Care Med. 2025 Jul 15. doi: 10.1164/rccm.202506-1388ED. Free article

New insights in preanalytical quality. Plebani M, Scott S, Simundic AM, Cornes M, Padoan A, Cadamuro J, Vermeersch P, Çubukçu HC, González Á, Nybo M, Salvagno GL, **Costelloe SJ**, Falbo R, von Meyer A, Iaccino E, Botrè F, Banfi G, Lippi G. Clin Chem Lab Med. 2025 Apr 24;63(9):1682-1692. doi: 10.1515/cclm-2025-0478. Free article

Non-invasive fibrosis tools lack clinical utility for identifying advanced fibrosis in Fontanassociated liver disease: a retrospective cohort study. Armstrong P, Moriarty A, Hughes R, Mehigan N, Savage R, Walsh K, **Russell J**, Stewart S. BMJ Open Gastroenterol. 2025 Aug 5;12(1):e001733. doi: 10.1136/bmjgast-2024-001733. Free article

Reviews / Articles of Interest

Next level clinical biochemistry. Integration of new assay technologies, bioinformatics, machine learning and AI into the labs of the future. Advancing clinical biochemistry: addressing gaps and driving future innovations.

Cao H, Oghenemaro EF, Latypova A, Abosaoda MK, Zaman GS, Devi A. Front Med (Lausanne). 2025 Apr 8;12:1521126. doi: 10.3389/fmed.2025.1521126. Free article

Focuses on lipid management strategies for preventing atherosclerotic cardiovascular disease (ASCVD). Statins and alternative therapies are discussed. Several complex cases and their interpretation are included.

A Critical Appraisal of Lipid Management in the Post-Statin Era: Comparison on Guidelines, Therapeutic Targets, and Screening in a Case-Based Framework of Lipid Management. Spitz J, Patel J, Agarwala A, Sharma G, Mehta A, Natarajan P, Nasir K, Morris P, Blumenthal RS, Shapiro MD. JACC Adv. 2025 Jun;4(6 Pt 2):101823. doi: 10.1016/j.jacadv.2025.101823. Free article

This article bemoans the extent of undertreated patients at high risk of ASCVD. In addition, the lack of follow-up of patients who have undergone surgical interventions is also a concern.

Despite more aggressive lipid-lowering guidelines worldwide, the majority of high-risk patients remain undertreated. Toth PP. Eur J Prev Cardiol. 2025

May 12:zwaf288. doi: 10.1093/eurjpc/zwaf288. Free article

The Endocrine Society Vitamin D Guidelines of 2024 have come in for a significant amount of criticism for a variety of reasons. This paper is one example.

Vitamin D for the prevention of diseases in children: A rebuttal to the 2024 Endocrine Society Clinical Practice Guideline.

Nwosu BU. Front Endocrinol (Lausanne). 2025 May 29;16:1578609. doi: 10.3389/fendo.2025.1578609. Free article

This paper comprehensively lays out strategies to encourage lifestyle modifications to manage adults with type 2 diabetes.

Executive Summary of Lifestyle Interventions for Treatment and Remission of Type 2 Diabetes and Prediabetes in Adults: A Clinical Practice Guideline From the American College of Lifestyle Medicine. Rosenfeld RM, Grega ML, Karlsen MC, Abu Dabrh AM, Aurora RN, Bonnet JP, Donnell L, Fitzpatrick SL, Frates B, Joy EA, Kapustin JF, Noe DR, Panigrahi G, Ram A, Levine Reisner LS, Valencia WM, Weatherspoon LJ, Weber JM, Staffier KL, Gulati M. Am J Lifestyle Med. 2025 Jun 10;19(2 Suppl):132S-154S. doi:

10.1177/15598276251325485. Free article

Vitamin K has been getting a lot of attention lately. Much like vitamin D it has pleiotropic properties with roles in numerous organs and physiological processes. Some of these are covered in this overview.

Vitamin K: Metabolism, Genetic Influences, and Chronic Disease Outcomes.

Dupuy M, Bondonno NP, Pokharel P, Linneberg A, Levinger I, Schultz C, Hodgson JM, Sim M. Food Sci Nutr. 2025 Jun 17;13(6):e70431. doi: 10.1002/fsn3.70431.

A bone protein with systemic functions (some of which require vitamin K as an activating factor).
Osteocalcin: A bone protein with multiple endocrine functions.

Li J, Lou S, Bian X.Front Cell Dev Biol. 2025 Apr 23;13:1564751. doi: 10.3389/fcell.2025.1564751.

Federation / Journal Links

EuroLabNews: The current edition of the EFLM Newsletter, EuroLabNews (May/June 2025).

CCLM: The latest issue of Clinical Chemistry and Laboratory Medicine (CCLM 63 (9) 2025.

IFCC eNews: July-August 2025.

eJIFCC: Latest IFCC journal issue, eJIFCC 36(2) June 2025.

Upcoming EFLM 'Meet the Expert' Live webinar 25th September 2025 16.00 CET: *Novel equations for estimating LDL-cholesterol from the standard lipid profile.*

Podcast: Journal of the American Association (JAMA) Clinical Reviews. Authors discuss their papers on various clinical topics.

Latest edition of the Scandinavian Journal of Clinical and Laboratory Investigation has an interesting review on the history and future developments of the 'reference interval' concept.

Do No Harm - Meeting Report and Book Review

By Dr. Peadar McGing, Principal Clinical Biochemist (retired)

The Lectures

'Special lecture "On Making Mistakes" – Mr Henry Marsh, Neurosurgeon, NHS' was the inviting title on the notice for the Mater Hospital's Surgical Case Conference of June 22nd, 2016. The statements that 'some members of the national press will be in attendance' and 'Special gift for all attending meeting on time' ensured I was seated in the hospital's Catherine McAuley Lecture Theatre in good time for the 07:45 start. The lecture was indeed special and the special gift was a signed copy of Mr Marsh's 2014 book *Do No Harm*. I will briefly review this excellent book later in this article.

Fast forward to 2025. In the intervening nine years I had joined Mr. Marsh in 'retirement', and had encountered neurosurgery up close through the skills of Mr Mohsen Javadpour, neurosurgeon in Beaumont, who removed a craniopharyngioma from my brain. When I saw the notice for the Surgical Case Conference of May 28th — 'Communication, Consent and How to Avoid Trouble — Painful Lessons from 45 years of Neurosurgery' to be presented by 'Mr Henry Marsh, Retired Consultant Neurosurgeon' I knew I couldn't miss hearing him speak again.

As I walked along Eccles Street towards the Catherine McAuley Centre, I happened to meet Mr Marsh and had the pleasure of a short chat with him. Having informed him that I had been at his previous lecture in the Mater, he advised that there would be overlap between the two lectures (naturally). My report below does not differentiate between the talks, though more is taken from the most recent one.

I love cartoons and I must mention one which he used; the caption 'Meetings – the practical alternative to work' brought a wry smile to my face. I also found it interesting when he stated that 'when operating, well slept self-confident surgeons can be more dangerous than tired and anxious ones'.

It will be no surprise that a lot of the advice given by a surgeon speaking at a Surgical Grand Rounds concerned surgery. However, there was also plenty of advice and anecdotes of interest for the benefit of the medical consultants and their teams and the non-medical personnel in the lecture theatre. An interesting comment he made at the end of this year's talk was that communication is mainly about listening. "You have to stop yourself talking", he advised.

Of relevance to all who work in healthcare was his views on checklists. He told us how he was originally opposed to checklists, which he saw as a bureaucratic imposition. He was forced to reconsider this view during a discussion about the matter. After he had given his opinion one of the team reminded him of an occasion when he had almost operated on the wrong side of a patient's brain. He, 'the reformed Mr. Marsh', now believes that checklists do have a place, but are best when tweaked locally with lots of input from all groups of users.

For all of us anxious not to make mistakes, or at least not serious ones and not too many, he had a key message regarding our colleagues and teamwork. He told us that a fundamental rule of human nature is "other people are better at identifying my mistakes than I am".

The final slide of his May talk was 'How to Avoid Trouble'. Three key points that apply to all healthcare workers were

- Be a good colleague and hope to have good colleagues.
- Be profoundly self-critical, think slowly, and don't be afraid to ask for help.
- [As discussed above] use checklists where appropriate.

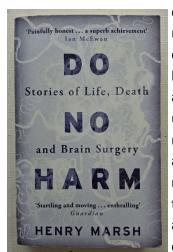
The Book - 'Do No Harm'

What about the book? Firstly, a confession — when I got the book I read a few chapters and then decided it would be a good read, so I decided to keep it in my office to read when I had time. Bad idea. I lent it to some colleagues who brought it home to read and were very enthusiastic. When I retired, the book joined a queue of 'must read' books. Then, after hearing Mr. Marsh a second time, the book was retrieved. I planned

to read a few chapters initially so I could comment in this article, but it hooked me. I read the whole book in a relatively short time.

Audience

'Do No Harm' is written for a lay audience, so you



to don't need be neurosurgeon to enjoy it. I feel that being healthcare worker does add extra layer of understanding and enhanced my enjoyment. The chapters all take a particular condition requiring neurosurgery and tell stories through anonymised cases. The chapters are not too long

and there is a very appealing mixture of case history (including human story and clinical description), humour (especially when giving out about NHS bureaucracy), and personal insight.

Laboratory

The lab does get a few mentions. We'll forgive Henry that it is mainly in the context of problems – after all, much of the book deals with his own difficulties. One example concerning a blood supply problem was an IT issue, but did serve to highlight the lab's importance. In that particular case he turned up to theatre only to find the operation delayed by a few hours, due to 'no blood'. When he questioned why, as the patient had been in hospital for two days, it transpired the lab had done the blood testing. Unfortunately, the new Electronic Patient Record system being installed that day could not access the results from the old system. Those of us who have been through such changeovers might question the thoroughness of the checks pre the go-live date, or we might find it uncomfortably recognisable.

Mr Marsh's response was interesting. 'Years ago I would have stormed off in a rage, demanding that something be done, but my anger has come to be replaced by fatalistic despair as I have been forced to recognise my complete impotence as just another doctor faced by yet another new computer program in a huge, modern hospital.'

Career Beginning

Though he did not say so himself, I thought there

was an important message in his description of getting into medicine. I believe in having some flexibility in helping people into their choice of careers without being blocked by their school subject choices. After a primary degree in Politics, Philosophy and Economics from Oxford, his school subjects became an obstacle to becoming a surgeon, the career he had come to focus on. I was later accepted to study medicine at the only medical school in London which took students without any scientific qualifications. Having been rejected by all the other London Medical Schools since I had neither Olevels nor A-levels in science I had telephoned the Royal Free Medical School. They asked me to come for an interview next day'. In the course of that interview the Medical Registrar, 'an elderly, pipe-smoking Scott', advised him that 'it was best to see medicine as a form of craft, neither art nor science – an opinion with which I came to agree in later years'.

Family as Patients

The cases in most of the book chapters involve the author as surgeon, but there are also chapters on him as parent of a patient, as son of a patient, and as a patient himself. These episodes gave him greater insight, and they also make for very interesting reading.

When his son was just three months old Mr. Marsh was a newly qualified junior doctor working on call when he got bleeped for an outside call [very much pre mobile phone era]. When he answered the call, he heard his desperately anxious wife tell him that their child had been admitted urgently to the local hospital with 'some kind of problem in his brain'. Happily, surgery to remove a choroid plexus papilloma was successful.

His own main clinical problem was an eye problem, specifically 'the beginnings of a detached retina', symptoms of which he had ignored for some weeks. In discussing that, he wrote 'when doctors fall ill themselves they tend to dismiss their initial symptoms and find it hard to escape the doctor-patient relationship, to become mere doctors themselves.' With access to rapid treatment his eye was operated on, and a successful outcome procured. On another occasion he suffered a fracture dislocation of his ankle, and he describes very well his journey through the A&E [now the Emergency Department]. Subsequent to this book he was diagnosed with advanced prostate cancer.

Pituitary

I must admit that I was happy to see there was no chapter on craniopharyngioma, the condition I had been operated on for. Hopefully that was because relative to other neurosurgery it is very straightforward (and boring). I will declare that I did find the chapter on Pituitary Adenoma interesting partly because of the similarity to the surgery performed on me. It did remind me though, that all surgery carries risk, especially with statements such as 'There are, however, two major arteries next to the pituitary gland that can, if the surgeon is exceptionally unlucky, be damaged during the operation'. This chapter would be of interest to any Clinical Biochemist who has ever analysed or reported Pituitary Function Tests, if only to remind us all of the complex, and sometimes tragic, stories that lie behind.

Management

An interesting thread through the book, which I confess often brought a smile to my lips, was his discussion of hospital management. For example, in one case — 'So I made arrangements for the operation, which I expected to be a long one. This was many years ago, when hospitals were different places, and all I had to do was ask the theatre staff and anaesthetists to stay on longer than usual. There were no managers whose permission had to be sought.'

Patient charts, the paper variety, also came in for

comment. He was certainly not impressed by the contents, especially in respect of key information he was looking for 'such as when I had operated on the patient, or the analysis of the tumour I had removed.' In respect of the size of the charts he informed his readers that 'The greater part of the notes, I should explain, consist of nursing charts recording the patient's passing of bodily fluids on previous admissions and are no longer of any interest or importance'.

Overview

In this review I've tried to give a flavour of the book and some points of interest to clinical laboratory scientists. However, the main attraction of the book is the interesting stories of patients, stories delivered in a very readable and engaging manner. The stories are told to illustrate both the highs and lows of the author's neurosurgery career. The book is still available from main booksellers, a testimony to how good it is, and is available from public libraries (27 copies available through the Public Library Service). Well worth reading.

After *Do No Harm*, Henry Marsh wrote two further books, which I do plan to read:

Admissions – A Life in Brain Surgery, first published in 2017.

And Finally – A Neurosurgeon's Reflections on Life, published in 2022.



Some Free to Access Reviews on Biochemical Aspects of Neurology

Vitamin K Properties in Stroke and Alzheimer's Disease: A Janus Bifrons in Protection and Prevention. Grimaldi L, Cavallaro RA, De Angelis D, Fuso A, Sancesario G. Molecules. 2025 Feb 24;30(5):1027. doi: 10.3390/molecules30051027.

Unlocking the Potential of Vitamin D: A Comprehensive Exploration of Its Role in Neurological Health and Diseases. Khatoon R. Biology (Basel). 2025 Mar 10;14(3):280. doi: 10.3390/biology14030280.

The Role of Magnesium in Depression, Migraine, Alzheimer's Disease, and Cognitive Health: A Comprehensive Review. Varga P, Lehoczki A, Fekete M, Jarecsny T, Kryczyk-Poprawa A, Zábó V, Major D, Fazekas-Pongor V, Csípő T, Varga JT. Nutrients. 2025 Jul 4;17(13):2216. doi: 10.3390/nu17132216.

Homeostasis and metabolism of iron and other metal ions in neurodegenerative diseases. Chen L, Shen Q, Liu Y, Zhang Y, Sun L, Ma X, Song N, Xie

J. Signal Transduct Target Ther. 2025 Feb 3;10 (1):31. doi: 10.1038/s41392-024-02071-0.

Say hello to my little friend... micronutraceuticals in neuroenergetics, neuronal health, and neurodegenerative diseases.

Mason S. Front Neurosci. 2025 Apr 23;19:1498655. doi: 10.3389/fnins.2025.1498655.

Klotho antiaging protein: molecular mechanisms and therapeutic potential in diseases.

Hajare AD, Dagar N, Gaikwad AB. Mol Biomed. 2025 Mar 22;6(1):19. doi: 10.1186/s43556-025-00253-y

Cardiovascular Risk Factors, Alzheimer's Disease, and the MIND Diet: A Narrative Review from Molecular Mechanisms to Clinical Outcomes.

Ataei Kachouei A, Singar S, Wood A, Flatt JD, Rosenkranz SK, Rosenkranz RR, Akhavan NS. Nutrients. 2025 Jul 16;17(14):2328. doi: 10.3390/nu17142328.



ACBI CPD Day - Friday 12th September 2025

The ACBI Continuing Professional Development Day will be held on Friday 12th September (10.00 - 16.00) in the Ashling Hotel, Dublin.

The registration fee for ACBI members is €65 and for non-members is €100. Register for this event through the ACBI website.

Programme

Professionalism, Leadership & Innovation: ACBI Forum, Friday 12th Sept2025, Montpelier Suite, Ashling Hotel, Dublin 10:00am – 4:00pm

9:30 - 9:55 Welcome and registration (tea, coffee and scones on arrival)

10:00 - 10:40 Professional Regulation Understanding CORU's Regulatory Model Dr Catherine Byrne, Head of Strategy and Policy, CORU

10:40 - 11:20 Patient and Public Involvement (PPI) in Healthcare & Research Niamh Dillon, PPI in Research Manager, RCSI

11:20 - 12:00 From Proposal to Approval: Ethical Essentials for Success in Health Research (TBC)

12:00 - 12:40 Social Media for Healthcare ProfessionsMuiriosa Ryan, Social Media and Digital Marketing Manager,
HSE

12:40 - 13:00 Roundtable Discussion Dr Caroline Joyce,

Principal Clinical Biochemist, CUH

13:00 – 14:00 (hot Lunch, tea & coffee provided in Chesterfields Restaurant)

14:00 – 14:40 Kidney Stones Uncovered: The National Service and the Usual Suspects Dr Lucille Kavanagh Wright, Principal Clinical Biochemist, MMUH

14:40 - 15:20 Biomarkers for Acute Mild Brain injury: The BAMBI Study Simon Barrett, Medical Student & Dr Paula O'Shea, Consultant Clinical Biochemist, MMUH

15:20 – 15:55 A Personal Perspective on Oral and Written Communication Dr. Peadar McGing, Principal Clinical Biochemist (Retired, Formerly of MMUH)

15:55 – 16:00 – Closing Remarks *Dr Paula O'Shea, Consultant Clinical Biochemist, MMUH*

Upcoming Meetings

ACBI 47 14th and 15th November 2025, 47th Annual Conference of the Association of Clinical Biochemists in Ireland, Hodson Bay Hotel, Athlone

What's New in Diabetes and Endocrinology Royal Society of Medicine, London, 20th November 2025

49th Irish Endocrine Society Annual Meeting 7th and 8th November 2025. Midlands Park Hotel, Portlaoise

Standardising POCT for Ireland Zoom Meeting, 11th September 2025, 0900 to 12.50. Free to attend. Link has Information, programme and Zoom registration details.

Laboratory Automation Virtual Event Series 2026 Free virtual conference March 18th 2026.

Educational

Influence of haemolytic anaemia on HbA1c analysis. A case report.

https://pmc.ncbi.nlm.nih.gov/articles/ PMC11745879/

Wide array of clinical and laboratory calculators etc

MDCalc - Medical calculators, equations, scores, and guidelines

An example of an RCPath Part 1 MCQ paper

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An example of an RCPath Part 2 oral exam paper

Sample-Paper-FRCPath-Clinical-Biochemistry-Part-2-Module-2-Oral.pdf