

# BMUS))

# British Medical Ultrasound Society

NEWS

www.bmus.org – WINTER 2015/6

## BMUS / SCoR

Guidelines for  
Professional  
Ultrasound  
Practice

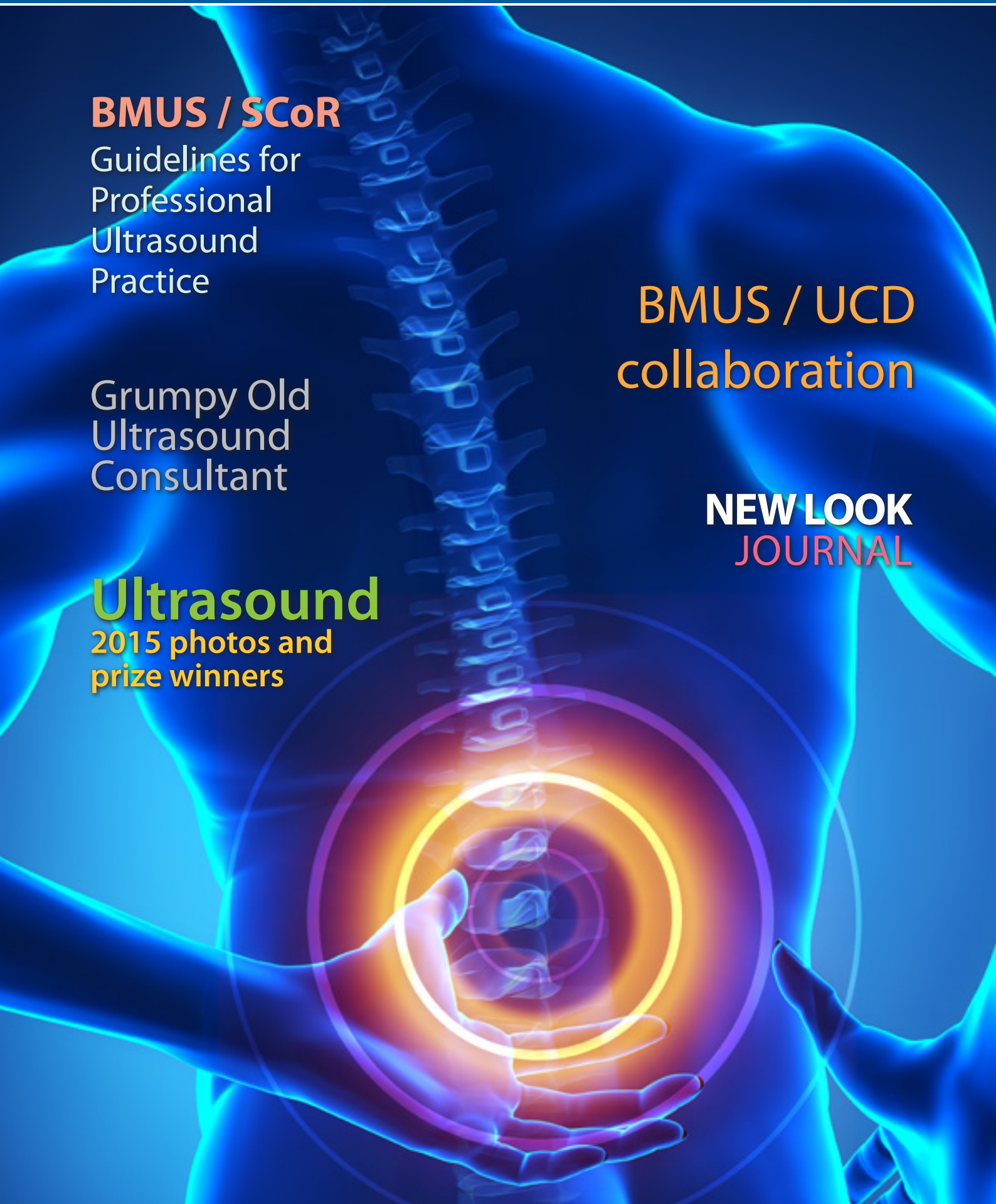
Grumpy Old  
Ultrasound  
Consultant

## Ultrasound

2015 photos and  
prize winners

BMUS / UCD  
collaboration

NEW LOOK  
JOURNAL

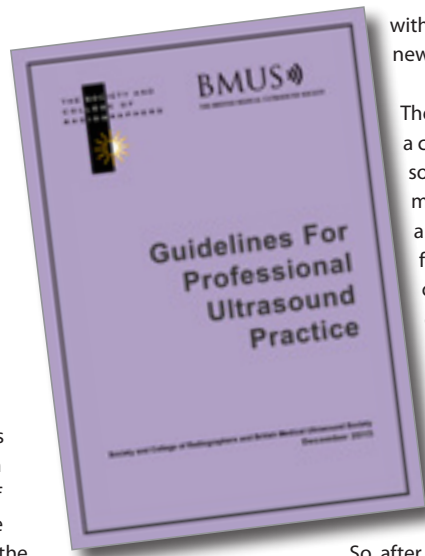


# Professional Development Report -

**Pamela Parker**

As those of you who attended the fantastic and highly successful BMUS annual scientific meeting in Cardiff will be aware the update and revised Guidelines for Professional Ultrasound Practice were launched in December 2015. This document has been written by members of the BMUS Professional Standards Group in conjunction with the Ultrasound Advisory Group of the Society of Radiographers. The document is a revision of the original UKAS Professional Standards publication which was last revised in 2008. It is testament to the quality of that publication that aspects of it are unchanged and are included within the new and revised document.

The Guidelines for Professional Ultrasound Practice publication include advice on consent, examination times, reporting, audit and discrepancy management as well as clinical chapters based on expert advice in common clinical scenarios. The publication is an electronic document



with the intention of updating, revising and adding to as and when new and contentious issues arise.

The PSG of BMUS and the ScoR have worked hard to produce a comprehensive document but we are aware that there are some omissions which will be addressed in the forthcoming 12 months. Given that this is a new joint project, with a different approach to the previous UKAS documents we would welcome feedback from the profession regarding it's content. Please contact the BMUS general secretary with any constructive or critical feedback you may have - joy@bmus.org

Where can you find this valuable resource & essential reading for the professional? On the BMUS website in the members' section of course. Access is available to all BMUS members – join now to realise the benefits of membership  
www.bmus.org

So, after such a productive and busy 2015 you may think the Professional Standards Group are taking a rest, but no! We are embarking on a new project to support the audit produced earlier in the year. Keep your eyes on the BMUS website and newsletters for updates throughout the year. If you'd like to get involved with this or any other work undertaken by the society please contact me or the general secretary.

## Letters to the Editor

*Dear Editor,*

I would like to congratulate BMUS on a very well organised conference with some fantastic scientific presentations. The debates were excellent but unfortunately I was not given the opportunity to respond in the debate and would like to contribute further on the role of outsourcing ultrasound services to independent providers.

As an independent provider of vascular ultrasound to the NHS, with over 15 years' experience, we provide full time services in eight NHS hospitals and outreach clinics to a further two NHS hospitals across the Northwest. We are the largest independent provider of vascular ultrasound in the UK, completing 70,000 examinations each year. As an ethical independent provider, I feel it is important to dispel some of the myths that we are all money grabbers!

Over the last 15 years we have invested over £1.5 million training staff who now account for approximately 20% of the national vascular ultrasound workforce. We are consistently approached by local NHS departments to assist in their training under the NHS scientist training programme (STP) and have trained all AAA screening technicians in Greater Manchester and many other screeners in the North East. All our staff undergo 3.5 year post-graduate training at University while completing their accreditation with the Society of Vascular Technology GB&I. The company pays all training fees for our staff (including professional registration and examination fees) and we do not receive NHS funding to support our training programme.

Independent ultrasound providers are accountable to the same bodies and same levels as the NHS. Being accountable for our

actions is crucial for maintaining professional standards and helps provide an 'A' grade service to our clients, the NHS. As a company we are CQC registered and all our full time sites have passed at least two inspections. We were the first and remain the only vascular ultrasound laboratory to be accredited by UKAS. In-house protocols are scrutinised by senior NHS employees who act as UKAS inspectors ensuring a high standard. We audit 10% of all investigations by blind peer-to-peer review or comparison of scans to other modalities. In the last quarter, 92% of patients rated our service as good or excellent. I believe our standards of service are amongst some of the highest in the UK.

The opinion that independent providers are purely out to make money from the NHS is abhorrently misguided. Although the AQP tariff was set up at £44 (less than 20 minutes) and £56 (more

than 20 minutes) to ensure that the NHS was not overcharged for services it is not flexible enough for the role of ultrasound assessments. To put this into context, a simple echocardiogram is paid £74 and takes around 30 minutes. It does not take into account the relative complexity of vascular ultrasound investigations compared to other ultrasound scans nor the fact that we may be asked to perform multiple scans at the same appointment. There is also no option to charge for time taken to report results, a fundamental role of a vascular scientist which adds to the cost per patient not covered by the AQP tariff. This clearly demonstrates that the AQP tariff is not fit for purpose - either consistently over or under paying for assessments. This may go some way to explaining the £3 billion shortfall presented by those that were against the motion. Based on a full year of activity our charges are typically between

# News from the North,

**Dr Carmel Moran**

**H**appy New Year to you all, from a bright but very cold Edinburgh. The Christmas decorations are all gone but the BMUS annual scientific meeting held in Cardiff in December still lives on brightly within the pages of this newsletter. What a great annual scientific meeting we had in December under the guidance of Nick Dudley and his scientific committee! The venue was outstanding, in particular the council debating chamber proving to be the forum for demonstration of many of our members' oratorical skills – and many of these debates still continue (see the letter section of this newsletter).

I also enjoyed the annual scientific dinner – the Welsh male choir and the photo-booth proving to be spectacular accompaniments to the evening. The annual dinner also provided me the opportunity to thank all our members, for their continued support and of course to award the Society's annual prizes and

awards – this is one of the real bonuses and highlights of being President. In particular, this year it was even more enjoyable as I was able to award Mrs Jean Wilson honorary membership of BMUS for her continued and sustained contribution to ultrasound. Photos of many of our prize winners can be found within the pages of this newsletter.

Looking ahead to December of 2016, this year's annual scientific meeting will be held in York, with Professor Adrian Lim as scientific chair. Having seen the conference venue brochures and draft programme, I believe we will have another outstanding meeting on the east coast.

Since our last newsletter, ultrasound has again made it into the BBC news on two separate occasions. In November, Prof Tanter's group in Paris demonstrated the acquisition of super resolution 3D images of blood network within a live animal brain. By using contrast microbubbles and very high frame-rates they were able

to map the whole brain with microscopic resolution. Such images have the potential to help with cancer and stroke diagnosis in the next 10 years.

Likewise in November, in Toronto, for the first time, ultrasound was used to breach the blood brain barrier in a patient to deliver cancer-fighting drugs. Ultrasound contrast microbubbles were injected into the blood stream of the patient and focussed ultrasound was applied to the skull. The microbubbles in combination with ultrasound reversibly open the blood barrier enabling chemotherapeutic drugs to be delivered by intravenous infusion.

These two news items gained considerable news coverage and bode well that ultrasound both as a diagnostic and as a therapeutic tool has a significant role to play for the foreseeable future.

*I wish you all a very happy 2016.*

30-50% lower than the AQP tariff, so in effect we subsidise other services by generating an excess income for our NHS partners.

The motion against provided some statistics demonstrating that £700 million from the NHS budget was spent solely by the CCGs on the tendering, administration and negotiation of contracts with NHS hospitals and independent providers. Indeed, we have been successful, as the only capable provider, in OJEC tendering for four large NHS contracts within a 50 mile radius. In all cases, the tender process was unnecessarily prolonged and expensive, leading to increased charges. This clearly demonstrates the fact that there is poor negotiation from the CCGs on contracts for service provision.

Although the majority of people after the debate still felt that there was no space for the role of independent providers within

the health service a very good argument was given for the motion. Post-debate there was a significant swing from 18% to 42% for the role of independent providers.

Perhaps independent ultrasound providers need to be more transparent and do more to change the opinion that we are all unethical money grabbers. We believe our service has invested significantly in training, capital investment, supporting research and innovation by developing new referral pathways and flexible services which have driven up standards not only in our region but nationally.

Yours sincerely,

Steven K Rogers,  
*Senior Clinical Vascular Scientist,  
on behalf of  
Independent Vascular Services Ltd.*

**Dear Editor**

It is with interest that I read the letter from Mr Steven Rogers and thank him on behalf of BMUS for his positive comments regarding the 2015 ASM. As chair of the debate session I found the arguments made both for and against the motion compelling and was glad we had the opportunity to air some views on this very contentious subject. Sadly, time constraints did not allow for full debate from the audience.

Mr Rogers makes some very valid points and there is clearly a presumption often made about independent sector providers that making money is a top priority. As Mr Rogers has outlined, this is a generalised assumption which is often gleaned from personal experience and is not necessarily evidence based. The vascular service HE providers input into training and service delivery to

support ultrasound services in North West. Sadly not all ISP's take this responsible approach to training and support, hence some of the views presented in the BMUS debate.

A positive outcome from the debate and the points raised here would be a commitment from all ISP's to support training and services in an equally responsible manner. Perhaps then the presumptions made would be unfounded and dispelled.

Yours sincerely,

Pamela Parker  
*Professional Development  
Officer, BMUS*



Andrew Andrews holding court



Jean Wilson in action in the Debating Chamber



Jane Bates delivering her last talk before retiring



'Cor Meibion Taf', male voice choir performing at the Annual Gala Dinner in the National Museum



Jane Bates and Tony Evans will be sadly missed. Happy retirement!



More fun and frolics at the 'Guess Who' photo booth



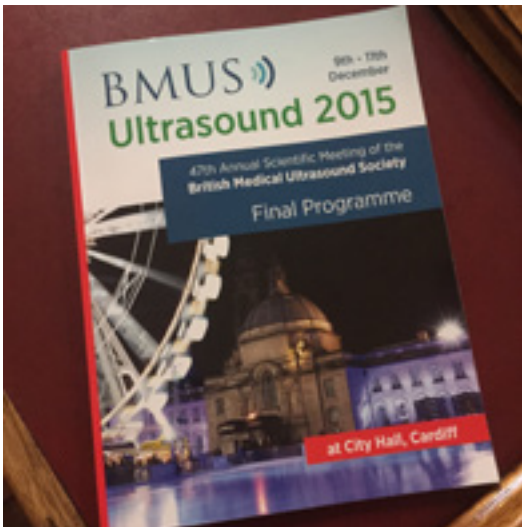
Dr Simon Freeman in the packed abdominal stream



BMUS President Dr Carmel Moran DMB lecturer Prof Peter Wells & SOC Chair Dr Nick Dudley



'BMUS up Scotty' - photo booth fun



Final Programme



A warm welcome 'Croeso' in the main auditorium



Prof Peter Wells delivering the Donald MacVicar & Brown lecture



Dr Trish Chudleigh delivering the Peter Twining lecture



Dr Peter Rodgers scanning on the Philips stand in the technical exhibition

# 2015 prize winners and awards

## Best posters at Ultrasound 2015

**Winner** - Renal cancer metastases to the thyroid: case studies, review of literature and new thyroid ultrasound signs, S Colley, E Mcloughlin, A Aziz, Queen Elizabeth Hospital Birmingham.

**Runner-up** - Investigating unwanted nerve damage in regional anaesthesia with micro-ultrasound imaging, A Chandra<sup>1</sup>, P Felts<sup>1</sup>, R Eisma<sup>1</sup>, G Corner<sup>1</sup>, C Demore<sup>1</sup>, G McLeod<sup>2</sup>, <sup>1</sup>University of Dundee, <sup>2</sup>Ninewells Hospital.

### Highly commended

**Security of patient data when transferring ownership of ultrasound systems**, J Moggridge, University College London Hospitals

**Ascites: It's all about the fluid!** C Footitt<sup>1</sup>, V Rudralingam<sup>2</sup>, B Layton<sup>1</sup>, <sup>1</sup>Royal Bolton Foundation Trust, <sup>2</sup>University Hospital South Manchester

**Lung ultrasound: time to inflate our skills?** C Williams, University of Portsmouth

## Best papers at Ultrasound 2015

**Winner** - Microbubbles – imaging the Peripheral Vascular Tree – a feasibility study, A Smith, PC Parker, OR Byass, K Chiu, Hull and East Yorkshire NHS Trust

**Runner-up** - Incidental Intussusception on USS; what you need to think about in adults and children? R Williams, St Georges Hospital, London

## Young Investigator-

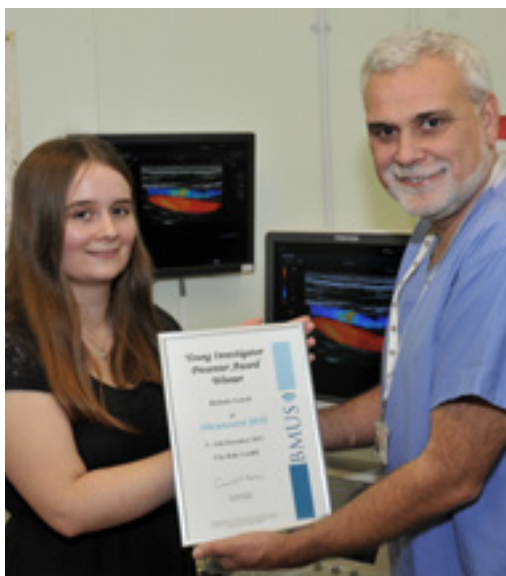
**Winner** - The use of SMI in surveillance of endovascular aneurysm repair (EVAR), B Gorell, University Hospital Wales



BMUS President Dr Carmel Moran and Poster Prize winner Steve Colley



Carmel Moran and poster runner-up Anu Chandra



Belinda Gorell Young Investigator winner and Prof Neil Pugh



The Gala Dinner and Awards Ceremony in the Grand Hall at the National Museum

## The *Ultrasound* Postgraduate Journal Prize 2015

The *Ultrasound* Postgraduate Journal Prize is awarded each year for the best article by a postgraduate student.

### Joint 1st:

**Ultrasound of lower limb sports injuries,** N Purohit, University Hospital Southampton

**Temporomandibular joint effusion and its relationship with perceived disability assessed using musculoskeletal ultrasound and a patient-reported disability index,** K Johnson, European School of Osteopathy, Maidstone.

### Runner-up:

**Trust Benign liver lesions: grey-scale and contrast-enhanced ultrasound appearances,** A Obaro, King's College Hospital NHS Foundation

## The *Ultrasound* Postgraduate Journal Prize 2016

If you would like to be considered for the 2016 Postgraduate Journal Prize, please submit your article by 1st August. Articles may be related to any field of medical ultrasound, but should be:

- A review, research paper or case report
- Completed within the last two years
- Supported by your academic supervisor

All articles should be submitted via the *Ultrasound* on-line Manuscript Central site at: <http://mc.manuscriptcentral.com/ult>. Please state in your covering letter that you wish your article to be considered for the journal prize. The prize is limited to student entries but does not exclude non-BMUS members. Full details are available on [www.bmus.org](http://www.bmus.org)

## The Paul Allan Prize for the best paper published in *Ultrasound* 2015

The inaugural Paul Allan prize for the best paper published in *Ultrasound* in 2015 was awarded to:

**What proportions of focal liver lesions detected by unenhanced ultrasound are inconclusive?** I Willits, Freeman Hospital, Newcastle upon Tyne

## BMUS Honorary Membership

**Jean Wilson** Programme Director, Diagnostic Imaging, University of Leeds was awarded life-long BMUS Honorary Membership for her outstanding service to ultrasound.

Jean started life as a sonographer in Leeds but moved into education. Jean developed the highly regarded ultrasound education programme at the University of Leeds, which continues to thrive despite increasing pressures within the NHS

She was a founding member of the United Kingdom Association of Sonographers and was one of the original authors of the UKAS guidelines for professional working practice.

Jean has worked tirelessly promoting sonographers and advanced practice and has been (and continues to be) a staunch supporter of BMUS over the years. For last couple of years Jean has been an active member of the Professional Standards Group of BMUS who, in association with the Society of Radiographers, have revised and updated the Professional Standards in Ultrasound (UKAS) document which was launched at the 2015 ASM in Cardiff.

Honorary membership is awarded in recognition of the work, support and dedication Jean has given, and continues to give to promoting the ultrasound profession and to BMUS.



Jean Wilson and Professional Standards Group Chair Pam Parker

# Honorary Secretary's report

For those who were unable to attend the BMUS AGM in Cardiff, here is a summary of the Honorary Secretary's Report detailing our Society's activities since the last AGM.

BMUS had a hugely positive and eventful year, achieving greater financial stability, launching a new website – [www.bmus.org](http://www.bmus.org), attracting over 600 delegates to the Manchester ASM, and organising several highly popular study days, many of which were fully booked.

- Head & Neck (Hull, 27th April)
- MSK Ultrasound (Stafford, 9–10th May)
- Obstetrics (York, 15th May)
- Professional Issues (Manchester, 14th October)
- International Paediatric CEUS (London, 25th–26th June)
- Paediatric (Leeds 25th Sept)
- Gynaecology, Imaging and Management (Dublin, 14th November)

The Gynaecology study day held at University College Dublin was particularly successful, attracting over 200 delegates. The event was covered in the Irish press and we plan to hold a similar study day again next year. Eight study days, a two day summer school, and ASM in York are planned for 2016.

Over the last year, BMUS has played a key role in guiding national policy towards improving professional standards and shaping the future sonographer workforce. The Professional Standards Group (PSG), led by Pam Parker, is currently in discussion with Health Education England (HEE) to improve career pathways for sonographers with a view to increasing the number of people choosing sonography as a profession. BMUS has a vital role to play in representing members and through our key involvement with CASE (the Consortium for the Accreditation of Sonographic Education). In 2015 the PSG also launched a number of practical tools for sonographers including a revised 'Justification of Referrals' document and a BMUS-recommended audit tool. Both of these are exclusively available via the members' area of the website. The PSG have also been working with SCoR (the Society and College of Radiographers) on updating and revising the 2008 UKAS

professional standards document. Many of you will be familiar with Sonographer, Jean Wilson, who is an active member of the PSG and became an Honorary Member of BMUS in 2015. A call for nominations for future honorary BMUS members will come out in the next newsletter.

Our scientific journal, *Ultrasound*, continues to be published quarterly by SAGE Publications. The journal now has over 300 institutional subscribers and can be accessed by almost 5000 institutions worldwide. Last year, *Ultrasound* published 31 articles including a special issue on Education and Training, and an article in the November 2015 issue on 'fetal response to music' which received wide press coverage. In 2015, BMUS partnered with SAGE to launch a new feature allowing readers to earn and register CPD points for reading selected journal articles available via a link in the members' area of the website. In addition to the annual post-graduate journal prize sponsored by SAGE, a new prize for the best paper in *Ultrasound* was created this year in memory of Paul Allan, sponsored by The Shadows Radiological Travelling Club.

Many thanks to the BMUS office for their dedication and hard work over the last year, as well as everyone who has contributed to the various BMUS committees, study days, journal articles, consultation documents, and organisation of the ASM. In the coming year we plan to expand the members' area of the website to provide further educational materials, videos, audit tools, and online CPD. BMUS members will also have an exclusive first glimpse of consultative documents relating to sonographer professional development and best practice guidelines.

It's been a productive and busy year for BMUS and wonderful to see that our society is thriving. Our priorities for the year ahead include raising the profile of the Society and offering BMUS members even more from their membership. BMUS membership currently stands at 1373 members. If you have any colleagues who are ultrasound practitioners, or have an interest in Medical Ultrasound, please encourage them to join!

**Emma Chung**

*BMUS Honorary Secretary*

## A NEW LOOK FOR THE ULTRASOUND JOURNAL

The front cover of *Ultrasound*, so familiar to us all, is changing. After 6 years, the cover has been redesigned in the style of the new look BMUS website and other BMUS branding. From February 2016, the front cover will be fixed for all issues and will not include an image or short titles of the content. At last, the hand of previous editor, Emma Chung can retire from holding the transducer at the top of the page! In addition to the new cover, the internal layout is changing to a format that is more consistent with industry standards. The new internal layout should make the content more discoverable and easier to index in research databases. We do hope that you will like to new look.

Authors who submit their work to *Ultrasound* will be pleased to know that the journal was recently selected for indexing in a new area of Web of Science called the Emerging Sources Citation Index, which, according to owners Thompson Reuters, will extend Web of Science to include high-quality, peer-reviewed publications of regional importance and in emerging scientific fields. This will make *Ultrasound* discoverable in Web of Science.

So, if you gave a talk or presented a poster at the recent BMUS Annual Scientific Meeting in Cardiff, why not write up your work for submission to *Ultrasound*. Publishing your work in the journal

ensures that a much wider audience can learn from your efforts, you will have a permanent record and your work will now be discoverable in Web of Science. If you need a little extra incentive, two of the articles that won journal prizes in 2015 started out as ASM presentations. So don't delay, get writing before it all fades into the past! You can find author instructions and all you need to know on the journal website at: <http://ult.sagepub.com>.





# UCD/BMUS Gynaecology Ultrasound Imaging and Management day

**O**n Saturday, November 14th the ultrasound team at University College Dublin (UCD), were delighted work with the British Medical Ultrasound Society to bring this high profile study day to UCD. This is the first time the British Medical Ultrasound Society have held a study day in the Republic of Ireland and the day attracted 200 delegates from all over Ireland and the United Kingdom. Ms Therese Herlihy, who leads the MSc Ultrasound programme in UCD and Dr Mary Moran, who directs the obstetric ultrasound courses in UCD worked with the BMUS team to make this extremely well received study day happen.

The programme focused primarily on gynaecology imaging and ultrasound in early pregnancy and included the latest in best practice guidelines, delivered by Dr. Peter McParland consultant obstetrician/ gynaecologist from the National Maternity Hospital. Surgical input was provided by Dr. Susanne Johnson an associate specialist at

the Princess Anne Hospital, Southampton, in order to gain a better understanding of where the ultrasound imaging sits in the patient pathway. Her talk in particular focused on the ovaries and highlighted the key role ultrasound can play in diagnosing ovarian pathology.

Other speakers covered issues such as ultrasound of the normal and abnormal female pelvis, included expert sonographer Mrs. Jean Wilson from University of Leeds and Dr. Anne Marie Coady, a radiology consultant at Hull and East Yorkshire Hospitals NHS Trust in the UK. Ms. Marion Maher, lecturer in interventional radiology and ultrasound in UCD delivered an excellent talk on sonographer role development with a focus on fertility ultrasound. Miss Jackie Ross, a consultant at King's College Hospital London and the clinical lead in their Early Pregnancy and Gynaecology Assessment Unit addressed the delegates on the issue of diagnosing and managing Caesarean scar pregnancies.

Reporting ultrasound images can be difficult. To complete the study day, a master class giving reporting hints and tips was delivered by Mrs. Jean Wilson and BMUS development officer, Ms. Pam Parker and Dr. Rhodri Evans consultant radiologist at the Neath Port Talbot Hospital, Wales. This masterclass aimed to give delegates increased confidence in providing comments and reports on the examinations they undertake.

Feedback from the study day was excellent from both faculty and delegates. The day sold out and highlighted a high demand for continuing ultrasound education. The 200 delegates were a mixture of radiographer sonographers, midwife sonographers, gynaecologists and radiologists.

UCD and BMUS brought a renowned faculty of experts from the UK and Ireland to Dublin to provide this educational and inspiring packed programme and hopefully it will be the first of many.



**Front row L—R:** Ms Ann Fleming (UCD), Dr Anne Marie Coady (Spire Hull and East Riding Hospital, UK), Ms Marion Maher (UCD), Ms Therese Herlihy (UCD), Dr Peter McParland (National Maternity Hospital), Mrs Pam Parker (BMUS)

**Middle row L—R:** Dr Mary Moran (UCD), Mrs Jean Wilson (Leeds University), Dr Louise Rainford (UCD)

**Back row L—R:** Dr Suzanne Johnson (Princess Anne Hospital, Southampton, UK), Ms Sruthi Raghavan (BMUS), Ms Rachel Meir (BMUS)

## A delegate's perspective

Sarah Goodwin, Hull & East Yorkshire NHS Trust

The Gynaecology Ultrasound imaging and management study day was situated in the University College of Dublin. The mid-sized city of Dublin has everything you want from a vibrant culture, stunning surroundings, and friendly inhabitants. The mix of arts, food, sports, theatre, drink, music, history, shopping offers all round entertainment for a quick visit pre or post course.

The venue, only a short distance from Dublin's centre, was easy to access and held all the facilities needed for a well organised day. On arrival, the delegates were given a warm welcome, offered tea and coffee and handed a welcome pack. The lecture room allowed excellent sound control with unobstructed views to the large projection screens. Plenty of good quality food and drink were offered throughout the day, with a superb coding system reducing frustrations sometimes caused by the queues for food.

The day ran to time with excellent, informative and relevant lectures from an elite group of professionals. High praise to BMUS and their UCD colleagues for organising an excellent day in a truly fantastic setting. I look forward to the next study day.

# Grumpy Old Ultrasound Consultant

## Chapter 4: The joys of modern technology

In the 1950s many eminent politicians, authors and scientists shared a vision of the 21st century that predicted robots and machines taking over the drudgery of work and leaving us to enjoy a life of almost limitless leisure. The English economist John Maynard Keynes (1883–1946), founder of the Keynesian school of economic thought, predicted that “technological progress might allow a 15 hour working week and abundant leisure by 2030”. Has this been your experience of the effect of technological progress on your working lives over the past twenty years? It certainly hasn't been mine.

Do you check your work emails at home? If so you are showing the symptoms of “workaholism” but don't panic you are in the company of 90% of other white-collar workers, according to a survey by the Adobe Campaign Team. More alarmingly, apparently half of us check our work emails whilst on holiday, 42% whilst using the bathroom and 18% whilst driving. Checking work emails seems to have become part of normal life. The Society of Labour, Industrial and Organisational Psychological Research in Oldenburg Germany, reviewed two major surveys of workers across Europe. They found a strong correlation between working beyond contractually agreed hours and increased rates of insomnia, headache, fatigue, anxiety and

stomach problems; it also increased the risk of cardiovascular and musculoskeletal illness. They called for stricter regulation to stop work invading peoples home lives. Sound familiar? It seems that, rather than enhance and improve our leisure time and reduce our stress levels, certain technological advances have made things much worse. For me the effects of reading my work emails after 9pm at night almost guarantees a sleepless night and I haven't dared to check my blood pressure after another email informing me that I am behind with my mandatory training on the use of anaesthetic gases, antibiotics, manual handling, waste disposal and various other topics which have virtually no impact on my working life and which I will have forgotten two days later. Almost enough to make you want to give it all up and join an “off grid” community (but not quite enough!).

My particular rant this month however is reserved for voice recognition (VR) technology which I am sure is familiar and probably used by most of the ultrasound practitioners who have been kind enough to read this far into this month's reflections. For many of you VR might be a fantastic improvement in the way that you to generate your ultrasound reports however, it exasperates me beyond words (well clearly not beyond words, but to distraction). As the department Luddite nobody was brave enough to force VR into my daily routine until long after it was standard practice for most of the rest of my colleagues. I know that

many people have made it work well for them by spending many hours setting up shortcuts, training the system to recognise their pronunciation and, for all I know, reading it bedtime stories; good luck to them but for me life is too short. I cannot deny that the ability to produce a report that is visible on the PACS system minutes after the ultrasound study has been completed and without the need to scribble anything in the patient's notes is a good thing for patient care but at what cost?

Until a year ago I had the luxury of a secretary who, having worked with me transcribing my tape recorded reports for seventeen years, pretty much knew what I meant in my recorded ramblings and was able to make the necessary corrections and produce a report which very rarely needed any significant alteration prior to verification. In my research for this article I audited the last 100 VR reports that I dictated and the number that were transcribed correctly was 20%. Does this really matter? Several studies have shown that the error rate in VR reports is much higher than those issued by digital dictation; a study by Basma et al in 2011<sup>1</sup> reviewed reports from breast imaging and found a 23% major error rate in VR reports compared to 4% generated by conventional dictation, please note this is reports that have been checked, corrected and verified after transcription. A similar rate of “potentially confusing errors” using VR was also found by Quint et al.<sup>2</sup> Would we permit any other change in our working practice that increased a

## Euroson 2015

Dr Gibran Yusuf

**In December the historic city of Athens played host to Euroson 2015 and proved a tremendous success with over 900 delegates registered.**

The Hilton provided an elegant backdrop for the conference in the heart of Athens, with a beautiful skyline view over the city. The meeting hosted specialist workshops in breast, obstetrics and gynaecology, head and neck, cardiovascular, musculoskeletal, urology, interventional and trauma ultrasound. In addition there were excellent talks delivered by eminent members of the ultrasound world, on innovations including contrast enhanced ultrasound and elastography.



clinically significant error rate almost six-fold? There is also evidence that the use of VR compromises efficiency; in one US study, reports dictated with VR took 50% longer to dictate despite being shorter than those conventionally transcribed and predicted an additional annual cost of more than \$76,000 for an average (American!) radiologist,<sup>3</sup> not to mention the effects on their wellbeing. Would it be cynical of me to speculate that the opportunity to employ fewer secretarial staff (if you can persuade all your imaging staff to adopt VR) might be a contributory factor? I am not surprised that elsewhere in our hospital a digital dictation system is in use rather than VR as I suspect that many of my colleagues in other specialities would not be as compliant to VR introduction as we have been.

For day to day use I have been surprised to find that raising my voice and the use of profanities does not improve the accuracy of my VR system. There seem to be certain words that I just cannot say properly to achieve recognition. "Opacity" is a particular problem, however many times I use the "improve recognition of a word or phrase" option it never works and invariably chooses to transcribe "a pasty" instead, possibly representing an attempt by the computer to adapt to its new culinary home in Devon. A colleague told me that, for certain words, it helps if you try to use an American

accent, this has been a revelation for "atelectasis" and "seminal vesicle" but walk past my office whilst I am dictating and it sounds like an episode from *Scrubs* or *ER* in a rather dodgy Midwest accent. An amusing by-product, familiar to all of you, is when the microphone is inadvertently left open when you are interrupted mid dictation by an unfortunate junior doctor sent by his superiors to "order" an ultrasound whose clinical indications displease; the refreshingly open discussion is then recorded for posterity. Even worse if the microphone is on when you are discussing the merits of the current Health Secretary following his plans for the new hospital doctors contracts, fortunately the transcription will be so inaccurate that not even Bletchley Park would be able to decipher it.

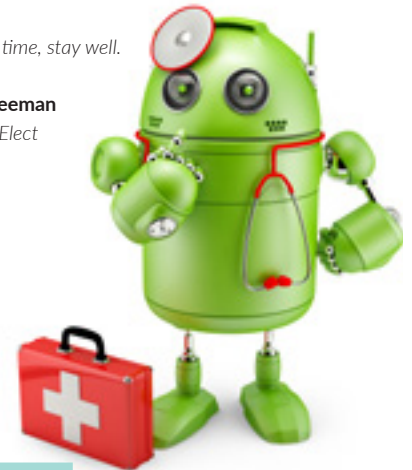
Ray Kurzweil, American polymath and leading expert in speech recognition has recently been hired by Google to work on machine learning and language processing. He predicts that by 2029 robots will have reached human levels of intelligence. My experience is that they have still got a lot of work to do! New technologies have revolutionised our speciality, the ultrasound images of the 1980s are amazing to us compared with the image quality we have now come to expect as standard. PACS has allowed the sharing of images by multiple users simultaneously, both locally and distant, with no "lost" film packets; reports are

available to clinicians as soon as they are verified. There are aspects to this revolution however that are not as successful and have been embraced without adequate evaluation.

The intrusion of work into our homes has not fulfilled the dream of an improved quality of life. Some new technologies (such as VR) are not sufficiently accurate, they create increased error and inefficiency and are not yet adequately responsive to the needs of the user. My life won't be improved until the technology is able to adapt to the way I work, rather than the other way around, and I don't even realise that it's there. Time to check my emails before bed....

*Until next time, stay well.*

**Simon Freeman**  
President Elect



#### Endnotes

- 1 Basma, Sarah, et al. "Error rates in breast imaging reports: comparison of automatic speech recognition and dictation transcription." *American Journal of Roentgenology* 197.4 (2011): 923-927.
- 2 Quint, Leslie E., Douglas J. Quint, and James D. Myles. "Frequency and spectrum of errors in final radiology reports generated with automatic speech recognition technology." *Journal of the American College of Radiology* 5.12 (2008): 1196-1199.
- 3 Pezzullo, John A., et al. "Voice recognition dictation: radiologist as transcriptionist." *Journal of digital imaging* 21.4 (2008): 384-389.

The conference began with an opening address by the outgoing president Professor Christoph Dietrich in which he thanked numerous members of the EFSUMB community and handed over the presidential medal to Professor Odd Helge Gilja. Also mentioned was the paper by Monica Lupsor Platon of Romania, entitled 'Liver Stiffness Is Influenced by a Standardized Meal in Patients with Chronic Hepatitis C Virus at Different Stages of Fibrotic Evolution' for the best published paper. Later came the Young Investigators session in which winners from their respective national societies in 8 countries competed for the European title. The session was entertaining with a number of excellent presentations, eventually joint winners were awarded to Rune Wilkens, Denmark, for his presentation entitled "Intestinal perfusion measurements with CEUS and dynamic contrast enhanced MR enterography: A comparison study" and Gibran Yusuf, UK, for his presentation on 'Multi-Parametric Ultrasonography of Testicular Haematomas:

Features on Grey Scale, Colour Doppler, Contrast Enhanced Sonography and Strain Elastography".

Athens provided a historic and magical centre, under the constant view of the Acropolis allowing delegates to take in the many sights (and the energetic ones to run the Athens marathon). An excellent evening in Athens was planned as an introduction to Athenian culture where delegates were taken to the old town of Plaka and tried Greek delicacies including mastic, feta and Greek sweets. To round off the evening there was a gala dinner where traditional Greek dishes were served and the award winners were presented.

Overall Euroson 2015 was hugely successful and Athens acted as a warm, welcoming host, setting a benchmark for all future Euroson conferences.

<b>March</b>	18th	Obstetrics, National Centre for Early Music, York
<b>April</b>	7th	EVAR (in conjunction with SVT), Manchester
	11th	Gynaecology, National Centre for Early Music, York
	15th	New technology, London
<b>May</b>	7 - 8th	MSK weekend, PGMC, County Hospital, Staffs
	12 - 13th	CEUS, King's College Hospital, London
	17th	Head and Neck, Mercure Hotel, Hull
<b>June</b>	23 - 24th	Hepatobiliary / Gynaecology 2 day Summer School, Leeds Radiology Academy
<b>September</b>	30th	Leeds Paediatrics Study Day in association with BMUS, Leeds Radiology Academy
<b>October</b>	TBA	Abdominal, Manchester
	15th	Renal, University College Dublin
<b>December</b>	7 - 9th	Ultrasound 2016, York Racecourse

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