MOOR NEWS
Greetings from Dartmoor

A VIEW FROM my bike

YI AWARD,
Euroson Congress

Ultrasound 2017
Photos and prize winners

Honorary Secretary’s Report summary 2017

Who am I?
It’s all about them, not me!
Moor News – Greetings from Dartmoor

As I write this column there are just eight days to go before Christmas. I am multi-tasking, typing this piece whilst engaged in discussion with my wife regarding the suitability (or otherwise) of a PlayStation 4 with FIFA 18, as a present from Father Christmas for a man of ‘fifty something’. I fear that the discussion is not going as well as I had hoped. The Phil Spector Christmas Album is playing in the background and it feels like a good time to reflect on the BMUS year.

The Annual Scientific Meeting in Cheltenham was a highlight of my year and, I hope, also for those of you who were able to attend. Peter Cantin and his team delivered an outstanding scientific and educational programme with formal lectures supplemented by workshops and satellite meetings. The racecourse proved to be an excellent venue supporting a large manufacturer’s exhibition and lecture theatres for three simultaneous streams in a bright and airy setting.

Both the key-note lectures were delivered by long-time BMUS supporters who presented entertaining, thought provoking and expertly delivered talks. In the Donald, MacVicar, Brown Lecture, Professor Jeff Bamber guided us through the revolution in ultrasound physics that has occurred during in his working life; few present will forget his demonstration of the Doppler effect as he ‘played’ a hosepipe swinging at great speed around his head (two revolutions per second required to give an audible Doppler shift!) putting those in the front row of the audience in fear of their lives. In the Peter Twining Memorial Lecture, Mr Timothy Overton shared his vision of the future of foetal medicine, including descriptions and images of in-utero surgery that would until recently have been the speculations of science-fiction.

The video of a lamb foetus being incubated and grown in a plastic bag created disturbing memories of the Wachowski Brothers film series ‘The Matrix’ but, if successfully translated to human foetuses, could transform care of pre-term infants. The Young Investigator Session was a highlight of the meeting, illustrating the remarkable quality of ultrasound innovation in the UK. It proved almost impossible for the judges to pick a winner but eventually Marcia Costa from the Institute of Cancer Research was chosen as the successful presenter and will represent BMUS at the 2018 Euroson meeting in Poznan, Poland. The Gala Dinner was held in the magnificent Pittville Pump Room serenaded by the fantastic Buzztones a capella group. For those of you who were unable to attend the meeting this year selected lectures will be available for you to view on-line on the member’s only section of the BMUS website in the New Year. The 2018 ASM will mark the Golden Anniversary of the Scientific Meeting, we intend to mark this momentous landmark with several special events, the meeting will be held in Manchester from 4th-6th December, put the date in your diary now!

This year BMUS has also run seven successful courses and has helped to educate well in excess of eight hundred people, delivering one of our core objectives. Next year we intend to increase this to eleven courses and I hope that you will be able to find something that you would like to attend, if study leave permits. The BMUS journal ‘Ultrasound’ continues to make progress under the stewardship of Editor-in-Chief Mr Bid Kumar with twenty eight articles published this year. Ultrasound is now listed on PubMed Central we are hopeful of achieving full Medline indexing in the next few years. Please consider writing an article for the journal next year as we try to increase submissions.

As you are probably aware this year has seen momentous changes in planning the future of sonographic education. BMUS has been closely involved, informing the work of Health Education England to produce a framework for sono grapher training. An immense amount of work has gone into this project led by the BMUS Development Officer, Pam Parker, and the BMUS Professional Standards Group. We are now starting to see the results of these endeavours with proposals discussed at an HEE stakeholder event in November. Radical changes are likely to be implemented before long and we are now optimistic that this will result in high quality training with adequate support for newly qualified sonographers and a proper career development pathway. There is also ever prospect that sonography may become a state registered profession in its own right. We are very grateful to Pam and her colleagues for the countless hours and expertise they have contributed whilst remaining cheerful and confident of a good outcome.

Further changes to the BMUS website give you more opportunities to participate in on-line education and CPD. New professional guidelines for ultrasound practice have been produced this year, particularly noteworthy are updated guidance for justification of ultrasound referrals; a potential godsend if, like most departments, you are drowning in the volume of ultrasound referrals. This guidance helps to ensure that we obtain the maximum benefit to healthcare from a limited resource.

BMUS membership has increased slightly this year. I hope that you will encourage any of your friends and colleagues who are not currently members to look at the benefits of membership and consider joining us. The multidisciplinary nature of the Society remains one of our most distinctive and cherished characteristics and one that must be carefully protected. We would particularly like to increase the numbers of medical physicists who choose to be BMUS members; if you know an ultrasound physicist then sign them up!

Overall therefore this has been a very successful year for BMUS. Next year will be a golden one as we celebrate our fiftieth Annual Scientific Meeting; we have a number of priorities for 2018 as we work to increase our membership and deliver our charitable objectives.

I have just found on-line research that shows that laparoscopic surgeons who spend more than three hours a week playing video games made 32% fewer surgical errors, I feel sure that this could be extrapolated to radiologists but this ground-breaking evidence seems to have fallen on deaf ears in this household. I hope that you all had a peaceful and happy Christmas and New Year and that 2018 is shaping up well.

Simon Freeman
President
I have enjoyed reading ‘Grumpy old US Consultant’s’ musings and insights on working in a busy Radiology department over the past couple of years, and as President Elect, I can feel the weight of expectation on my shoulders. What direction should I take? I asked myself. Where do I get my head round issues relevant to my work, sort out all the cross and chaos inflicted by the NHS, and de-stress? Answer is ‘on my bike’. My commute to and from home to hospital, and between hospitals and meetings, is done on two wheels not four. I started out almost twenty years ago, as do most, as a fair weather cyclist, but for the past 15 or so years (before most had heard of a cycle to work scheme!) I have been on two wheels almost without fail. So, come rain, sleet, snow and sometimes sun (well on the occasional dry day in west Wales) I bike to work.

Yes, I am branded as an odd ‘saddo’ by some, an object of mirth by others, and sometimes (I kid myself!) with envy as I beat my colleagues home on a Friday night, doing my courier impression weaving through the traffic jams. Dialogue with patients is always welcome; “You haven’t cycled up here in this weather have you doc?”…. well why else am I dripping pools of cold Welsh rain onto the corridor floor and seeing if my hands still belong to me?! Will the hot shower let me open my fingers again?, I wonder. My previous work base i.e., Morriston Hospital, is built on a hill (like most places in Wales). A good route along the valley floor, past the Liberty stadium (home of the Ospreys rugby team and the Swans football team) then a lovely climb through Morriston up the gloriously named ‘Chemical Road’ …you can picture it now can’t you?

Alright, I admit it - commuting on a bike through the sometimes damp west Wales weather is not always a pleasure. But seeing my colleagues go through their ten minute rant (though this has been noted to last all round the hospital looking for somewhere to park does start my day off round the hour) at the fact that they have been driving round and round the hospital looking for somewhere to park does start my day off at the grand old age of 59 is maybe not for the faint-hearted I grant. The comments you endure are interesting; patients are generally incredulous – it’s funny their expectations of doctors – we can preach to sort out all the dross and chaos inflicted by the NHS, and de-stress? and the Swans football team) then a lovely climb through Morriston up

the positively?
I am delighted to report that 2017 was another very positive year for the Society with continued financial stability, a slight rise in membership, a successful Annual Scientific Meeting (ASM) held in York in December 2016, a number of well-attended study days, and the continued success of the BMUS journal. Overall, the Society has succeeded in delivering its core charitable aims and objectives in the advancement of science and education relating to medical ultrasound and setting standards for ultrasound practice. This year BMUS has played a particularly important role in talks with Health Education England (HEE) toward shaping the future of sonography education.

**Membership**

BMUS membership stands at 1590 members; a slight increase compared to last year. After holding membership rates constant for the last 3 years, these have been increased by 2.6% from the 1st of January this year. As always, we need to encourage new members by promoting the benefits of BMUS membership.

One of the strengths of BMUS is our multidisciplinary membership, which includes Sonographers, Radiologists, Scientists and Health Professionals from a host of medical specialties. The number of ultrasound Physicists within the Society, and in UK NHS Hospitals, has declined in recent years. A number of initiatives are planned for 2018 to support hospital Medical Physicists and ultrasound researchers.

**BMUS Administration**

The BMUS office team is based in Milton Keynes, managed by our Executive Officer, Joy Whyte. Three new members of staff were appointed during 2016 and the BMUS HQ is now enjoying a welcome period of consolidation and stability.

**Science and Education**

Following a BMUS Strategy Day attended by BMUS Council members in 2016, we have introduced changes to the Society's structure over the last year to enable better communication and networking between the various Committees and Special Interest Groups (SIGs). In a change from previous years, committees now meet on the same day to facilitate networking and reporting. This BMUS 'super-committee' format has been positively received by attendees. In 2018, we plan to broaden the remit of the Safety group to cover 'Physics and Safety', with the former Science and Education group focussing predominantly on ultrasound Education and organisation of study days and the ASM.

Peter Hoskins has recently taken on the role of Curator of the BMUS Historical Collection and has made a list of recommendations, including digitisation of relevant slides, photos and other documents to anonymise and dispose of any patient identifiable material.

**Annual Scientific Meeting**

The 49th meeting of the Society (Ultrasound 2017), was held in the historic spa town of Cheltenham in December. The meeting included educational lectures and practical workshops, a scientific poster session, and a large manufacturers' exhibition. A total of 113 abstracts were received. The main scientific streams were, once again, complemented by the Therapy Ultrasound Group (THUGs) and Translational Ultrasound Satellite Meetings. The sad loss of two pioneers of medical ultrasound, and honorary BMUS members, Peter Wells and David Cosgrove was commemorated by two memorial lectures during the scientific programme in recognition of their important contributions to medical ultrasound.

The Proceedings of the 2017 Annual Meeting will be published during May as an online only supplement within the BMUS journal. Selected lectures can also be viewed online via the members’ area of the BMUS website.

**Study days**

The Education committee organised seven study days in 2017 attracting a total of 307 delegates.

- **April 2017** – Gynaecology Study Day, London – 58 delegates
- **May 2017** – MSK Study Weekend, Stafford – 35 delegates
- **June 2017** – Head & Neck Study Day, Hull – 17 delegates
- **June 2017** – Dublin Summer School, Ireland – 104 delegates
- **Sept 2017** – General Abdominal Ultrasound, Manchester – 29 delegates
- **Sept 2017** – Paediatric Study Day, Leeds – 25 delegates
- **Oct 2017** – Obstetrics Study Day, Birmingham – 43 delegates

During 2017, BMUS began to collect specific feedback from study day delegates and received a 91% response rate. Overall, just over half of study day attendees (51.5%) were BMUS members. On average, 92% (range: 82-96%) of delegates said that the course met or exceeded their expectations. Materials and resources from study days are accessible to BMUS members via the members’ area of the website. 10 study days and a 2 day summer school are already planned for 2018 - we are struggling to find suitable dates to squeeze them all in!

**Professional standards**

The Professional Standards Group (PSG) led by our Development Officer, Pam Parker, continues to work alongside CASE (the Consortium for the Accreditation of Sonographic Education) and Health Education England (HEE) to review the key aspects of sonographer career development: See Pam Parker’s full update on page 12.

The PSG have also revised good practice guidelines relating to Justification of Ultrasound Referrals, and produced a Professional Standards document in association with the Society and College of Radiographers (SCoR). Most recently, BMUS drafted a position statement on sonographer prescribing. Position statements and guidelines are available via the members’ area of the BMUS website.

**BMUS Journal**

The BMUS journal, Ultrasound, is published quarterly by Sage Publications and distributed to all BMUS members. The current Editor-in-Chief, Mr Bid Kumar, is a Consultant Obstetrician and Gynecologist from Wrexham Maelor Hospital. Bid is supported
by Deputy Editors: Sean Cournan, Colin Griffin, Gill Harrison, and David Oxborough. The Editorial Board meets annually at each BMUS ASM to discuss the direction of the journal and receive an update from the publishers.

In 2017, Ultrasound published 28 articles on various aspects of ultrasound, including a special issue on Safe Practice, published in February 2017. The journal offers two prizes each year, a postgraduate prize for the best submitted article and the Paul Allan Best Published Paper Award. There were 7 entries for the 2017 postgraduate prize sponsored by Sage Publications. Ultrasound currently has a circulation of approximately 7,500 readers and the journal received over 48,000 full-text downloads in 2017.

The current issue of the journal includes an ‘Obstetrics Special Issue’. During 2018 the publishers plan to make all supplemental data free to access online to support data sharing requirements. The journal is also considering strategies for strengthening its metrics to support an application for Medline indexing.

BMUS Website:
This year we continued to add to the members’ area of the website to incorporate online access to educational materials from study days, audit tools, online CPD, and exclusive access to the journal and consultative documents regarding sonographer professional development and best practice guidelines.

BMUS Newsletter:
In addition to the journal, all BMUS members receive a quarterly BMUS newsletter giving information about the Society’s meetings, committees, activities and diary dates. Production of the newsletter has been further streamlined this year. Thanks to all of our contributors, for making the newsletter an attractive, informative and enjoyable read.

Summary and future plans:
2017 has been another positive year for BMUS, reflected by continued financial stability, a slight growth in membership, and several successful study days. Our priorities in 2018 involve continuing to raise the profile of the Society and striving to improve the benefits of BMUS membership.

I would like to take this opportunity to thank everyone who has given up their time for BMUS by contributing to BMUS committees, study days, the journal, consultation documents, and organisation of the ASM. As always, the smooth running of BMUS is testament to the dedication and hard work of the BMUS Office team.

BMUS continues to be an influential, active, and vibrant society. This year we had an opportunity to contribute to the development of a structured NHS sonographer training programme, which we hope will be a positive step towards professional recognition of Sonographers. These changes will present new challenges and opportunities for BMUS to support Sonographers, and other ultrasound professionals, in the years to come.

Emma Chung
Honorary Secretary

Gynaecology Ultrasound Study Day

Topics include:
Acute Gynaecological Pathology
Endometriosis & Adenomyosis
Uterine/Endometrial Pathology & Fertility Subfertility
Early Pregnancy Pitfalls
And more...

19th April 2018
Novotel Paddington, London

Member £100  Non-Member £150
CPD approved  |  www.bmus.org
2017 prize winners and awards

Best Oral Paper
Winner: A clinical audit to establish if Salisbury District Hospital is complying with its chaperone policy for testicular ultrasound, Farrah Elsaghir; Clinical Radiology, Salisbury District Hospital.

Runner Up: The role of preceptorship in the development of a newly qualified sonographer, Una Haren; Tameside and Glossop Integrated Care Hospital NHS Foundation Trust.

Best Posters
Winner: Suman Bassi; University of Leeds, for ‘What is the impact of changing body position on liver stiffness estimates obtained using point shear wave elastography in fasted healthy volunteers’.


Young Investigator 2017
Winner: Marcia Costa; Institute of Cancer Research, for ‘Combined focused ultrasound and radiotherapy for the treatment of hypoxic tumours, using photoacoustic imaging as a planning tool’.

2017 Best Article published in Ultrasound by a postgraduate student

Runner Up: Rustu Turkay, Ercan Inci, Mustafa Gurkan Yenice and Volkan Tugcu; Tevfik Fikret cad., Istanbul, Turkey for ‘Shear wave elastography: Can it be a new radiologic approach for the diagnosis of erectile dysfunction?’

Second Runner Up: Mats A Fagerquist1,2, Vivek Sethi3, Eli Skyttør1, and Anders Oden4; 1Innlandet Hospital Trust, Kongsvinger Hospital, Norway, 2North Elfsborg County Hospital, Trollhattan, Sweden, 3Akershus University Hospital, Lorenskog, Norway, 4Chalmers University of Technology, Gothenburg, Sweden for ‘Intra-observer repeatability when assessing the foetal urinary bladder volume by the Virtual Organ Computer-aided AnaLysis and SUM-OF-CYLINDERS methods: A pilot study’

The Paul Allan Prize 2017 for best paper published in Ultrasound
Winner: Piero Miloro1, Eleanor Martin1,2, Adam Shaw1, National Physical Laboratory, Teddington, 2University College London for ‘Temperature elevation measured in a tissue-mimicking phantom for transvaginal ultrasound at clinical settings’.

Marcia Costa
Piero Miloro
Christmas and New Year has come and gone and the dust is settling from the BMUS Annual Scientific Meeting 2017. The New Year provides a slightly quieter time for some reflection after the hustle and bustle of Christmas and as Chair of the Scientific Organising Committee, it gives a little time and space to reflect on the ASM 2017.

It is always a bit of a gamble to introduce a new venue for the ASM, but as a sonographer in Plymouth, I was keen to bring the meeting to the South West. Cheltenham stood out as the best location of choice and I think that most delegates would agree that it proved an excellent venue for the meeting. The exhibition hall was spacious allowing ample room for our commercial friends who provided us with an excellent exhibition of both ultrasound equipment and services.

The lecture suites themselves were large enough to accommodate our delegates while remaining small enough to ensure a good atmosphere with lots of debate throughout all of the sessions.

Much of the credit for the success of the meeting must go to our stream-leads who, without fail, provided an excellent educational program which is diverse enough to be of interest to most ultrasound practitioners. Our masterclasses and practical workshops seem to go from strength to strength as each year our stream-leads benefit from the experience of the last, and refine their workshops to give the best possible experience to delegates.

The sheer amount of hard work and planning that goes into creating the ASM is enormous; this is led and managed by Joy Whyte and her office team, who again this year ensured we had a fantastic meeting. I would also like to thank all delegates on behalf of BMUS for their support and enthusiasm which makes the ASM and BMUS as an organisation so special.

December seems an awfully long way off but Joy and her team in the BMUS office are already beginning preparations for the ASM in 2018 which will take us back to Manchester. This year the chair of the Scientific Organising Committee will be Gerry Johnson and we are looking forward to another excellent meeting at the end of the year.

See the page opposite for the 2017 Award Winners and highlights from the meeting are in the following pages.

Peter Cantin  
Chair of 2017 Scientific Organising Committee
Who am I? – It’s all about them, not me!

If only leading an ultrasound team and holding the role of BMUS Development Officer was as easy as an off-road 10K race – life would be simple! For many of us daily routines can feel like we are wading through mud and not getting anywhere; and I am no different. However, I have the very great privilege of working with a great team of colleagues in my day job as well as a fabulous BMUS team supporting me in the Officer role I have taken on.

I am the Ultrasound Specialty Manager of the ultrasound department of Hull and East Yorkshire Hospitals NHS Trust. Hull is a ‘small’ seaside town in the East Riding of Yorkshire – I say small; the population is approximately 260,000. The East Riding itself comprises all of the countryside surrounding Hull extending up to the Vale of York and has a population of a further 335,000 residents. Areas of the East Riding show significant signs of affluence whilst Hull has an unemployment rate of over 6%, ranking 354th out of 376 local authorities in England and Wales (2011 census). Given this range of demographics, including a range of age, affluence and ethnicity it’s never dull in Hull.

2017 brought the City of Culture to Hull and I have been immensely proud of the achievements and changes this has brought, both to the city, its residents, and the sense of worth that being City of Culture has fostered.

The ultrasound department that I lead has 20 scan rooms, 28 sonographers, 17 support workers and one or two radiologists. We are a tertiary cancer centre and are consistently seeing an increase in demand – as is everyone working in ultrasound. My own specialty is general medical scanning with a specialist interest in contrast and fusion examinations. Despite the pressures of the managerial job I keep a very active clinical aspect to my weekly duties. I came into the NHS and radiology to work with and help patients; office time supports this but is not the centre of my interest.

My BMUS life started in 2001 when I was first elected to Council. I served a five year term and during this time worked closely with UKAS and the BMUS S&E committee organising the professional issues session of the Annual Scientific Meetings. I then had a break away from official BMUS duties up until 2013 when I was elected back on to Council and dived in head first as the Chair of the Scientific Organising Committee for the 2014 Annual Scientific Meeting. The highlight of that meeting has to be the Gala Dinner, sponsored by Toshiba Medical Systems and held at Old Trafford; the home of Manchester United. However, being a Rugby Union fan I will admit to not being entirely sure who I was meeting that evening – but don’t tell everyone!

I have served as the BMUS Development Officer since 2015, part of this role is to Chair the Professional Standards Committee. This is a relatively new role for the Society so has been a steep learning curve in terms of expectations and understanding the responsibilities of such a post. I couldn’t have chosen a more turbulent and active time to take this on. Since 2015 we have seen significant changes to ultrasound education emerging. Health Education England (HEE) are seeing sonography as a profession and are fully supportive of developing new strategies and a career framework to better provide for existing sonographers whilst encouraging new entrants. In addition, HEE are submitting a paper to the DoH supporting sonographer regulation and looking to CASE in terms of adding resource into this essential and hardworking body. Throughout all of this BMUS has had a presence, not just through me but also in representation by fellow Officers, Council members and interested parties from the BMUS membership.

As well as working with HEE I am also fully involved in BMUS study days, helping to shape programmes, source speakers and share best practice. Ensuring that BMUS continues to provide the best educational programme possible for our members!

With all these roles and responsibilities it can feel like wading through mud for sure, but the teams of Hull and BMUS have my back covered. For that I am sincerely grateful and certainly couldn’t do it without them!

Pamela Parker
Development Officer

Pam pictured with footballer Denis Law. Special guest at the 2014 ASM Gala Dinner.
Getting to know BMUS – Committees and their function

Following on from the last article, below we outline our committee structure and how each committee and group link into the BMUS Council.

Supporting the work of BMUS Council is the Science and Education Committee, this Committee comprises the Chairs and other members of four Special Interest Groups (SIGs).

- Education Group
- Editorial Group
- Physics and Safety Group
- Professional Standards Group

Science and Education Committee

The S&E Committee advises the Council on matters relating to the development, practice, teaching and monitoring of ultrasound in various fields where it is used for clinical or research purposes. It pulls together the activities of the SIGs and feeds this into the work of BMUS Council.

The Science and Education Committee and Special Interest Groups meet twice yearly, at these meetings. The Education Group, Editorial Group, Safety Group meet simultaneously, with the Professional Standards Group meeting earlier in the day. The members of these groups come together for the Science and Education Committee at the end of the day.

1. Education SIG

This group is chaired by the President Elect and is concerned with the educational aims of the society. The core activities of this group are the BMUS study day schedule and the Annual Scientific Meeting.

2. Editorial SIG

This group is concerned with the publication, performance and content of the BMUS Journal, Ultrasound. It is chaired by the Journal’s Editor-in-Chief and attended by the Deputy Editors. The Group aims to ensure that the Journal is of the highest professional standard and that it continues to be of benefit to our members.

3. Physics and Safety SIG

This group has recently had the Physics element added. There will be a full review of the scope of this group. However in the meantime the original scope will be observed and followed.

This group keeps abreast of all safety issues, reviews current safety literature and publishes ’Safe use, and potential hazards of diagnostic ultrasound’, reporting any relevant issues to the other SIGs, the Science and Education Committee and BMUS Council. They are tasked with advising our members on any safety issues and recommendations. The group includes between 4 and 6 members, of which one must be a medical practitioner, one a sonographer and one a scientist.

BMUS carries all safety statements and guidelines on its website for the use of our members.

4. Professional Standards SIG

The primary aim of the Professional Standards Group (PSG) is to develop standards relevant to ultrasound practice. The group has been developed by BMUS in response to a perceived need for standards in several areas in order to ensure safe and best practice.

These include:
- Criteria for referral for ultrasound
- Image and reporting quality
- Equipment performance, including criteria for suspension
- Sonographer education and career pathway

The Group is chaired by the BMUS Development Officer. To ensure that all specialities within ultrasound are represented, the balance of the Committee is formed by at least one of the following specialties - Consultant Radiologist, Sonographer (specialising in general medical ultrasound), and an Educationalist, Physicist/speciality Sonographer/Consultant Sonographer who serve a minimum of two years.

The structure of the Science and Education Committee and Special Interest Groups is relatively new and is still in a period of settling down. As we work with it we are sure there will be tweaks and adjustments. BMUS aims to be a responsive and flexible organisation and we hope our structure reflects this. We will keep you up to date of any structural changes as and when they happen.

Not a BMUS Member?

Did you know that BMUS membership costs as little as 24p per day, and that payment can be made by quarterly instalments.

All BMUS members receive discounted fees on Study Days and ASM registration, a printed copy of the quarterly scientific journal Ultrasound, access to policy documents and the ‘members only’ area of the BMUS website.

Join BMUS now and support your profession

Apply at: www.bmus.org/register/
Development Officer Report

Sonography Career Profession Framework

For those of you who have been following this column you will have seen several references over the years to sonographic education and the various sub-groups and projects boards that have been tasked with trying to sort ‘It’ out. But what is ‘It’? ‘It’ has become an ethereal being – we know we have a problem but what is it that we have been trying to solve? Over the duration of the projects and working parties ‘It’ has had a variety of meanings:

- It – the shortage of sonographers
- It – the rising demand and expectations of new pathways
- It – the funding crisis in education
- It – the development of undergraduate education
- It – the development of apprenticeship schemes
- Well, what is a sonographer anyway?

Well, ‘It’ turns out to be all of the above and more. The HEE Integrated Imaging Workforce Working Group (IIWWG) created a Sonographer workforce sub-group back in July 2017. This task and finish subgroup has been set up to look at ‘It’ with an ultimate aim of increasing the number of entrants and entry routes into the sonographer profession, thereby helping improve the staffing crisis and consequently help increase activity. The sub-group recognised the desperate need to clearly define and support sonographer career development. Defining a career in sonography will provide transparency in the pathway for new entrants, support practice development for existing staff and provide evidence of a distinct and independent professional title. The task and finish sub-group have identified three key aspects which need progressing to enable a career framework to develop:

- Scope of Practice and Preceptorship
- Training Placement and Capacity
- Regulation / Statutory Registration

Clearly all three aspects are interlinked and cannot be developed in isolation. However, the crucial starting point has been defining the scope of practice of a sonographer throughout differing stages of their career and education levels. As the BMUS Development Officer I have chaired the Scope of Practice sub-group, of which the BMUS Professional Standards Group forms a large proportion of the membership. We are working with other relevant professional bodies including representatives from CASE, PHE, RCR, SCoR, and the SVT, and have developed a proposed career progression framework. The initial draft of this was presented and discussed at the HEE Sonography event in November and the Professional Issues sessions at the BMUS ASM in December.

The Career Profession Diagrams for this framework are on pages 13 & 14.

This framework is the bare bones of a proposed career pathway that encompasses all entry route models including the emerging apprenticeship and undergraduate models. Important learning points from the nascent Birmingham City University (BCU) undergraduate programme have been listened to and incorporated within the proposed framework. My thanks go to the team at BCU for sharing the good, and the challenging, aspects of their new course.

We know we can’t yet answer every question to the level of detail we’d like, but we have identified a direction of travel, and the stakeholder event in November gave us a lot of useful and constructive feedback on how we can take this forward and do what’s best for patients, services and the profession. However, we know there is still much to do to work through the feedback, and some of the finer detail, in order to continue the progress that has been accomplished so far.

I present the proposed career progression framework here - it is a starting point. I know there will be challenges; we have already heard real concerns about finding training capacity and capacity for mentorship. We understand more sonographers are needed, and ideally we need them now. Sadly, there is no magic sonographer tree. What we present is an option to help nurture one for the future – to do this though, we need our profession engaged; actively and openly discussing the pros and cons, the good, the bad, and the downright scary bits. BMUS continues to have a very active role working with the IIWWG of HEE and our professional partners. As such, BMUS is collating comments and will use these to add detail to the framework. So please read and comment – we’d love to hear from you at office@bmus.org.

Pam Parker
Development Officer
**Proposed career and progression framework for the Sonography Profession**

**23 November 2017**

<table>
<thead>
<tr>
<th>Professional Title</th>
<th>Career progression</th>
<th>Career Level</th>
<th>Suggested Band*</th>
<th>Scope of role</th>
<th>Clinical and Reporting Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant Sonographer</td>
<td>Consultant Practitioners</td>
<td>8</td>
<td>8</td>
<td>An expert practitioner who is responsible for their own practice and is an active researcher, offers leadership and consultancy, educates and develops people within and external to the field of practice.</td>
<td>Interpretative reports giving diagnosis in complex findings. Guidance on future patient management given within report. Provides second opinions to junior staff in chosen sub-speciality.</td>
</tr>
<tr>
<td></td>
<td>Master's degree. Working towards relevant doctorate or equivalent</td>
<td></td>
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</tr>
<tr>
<td>Advanced Practice Sonographer</td>
<td>Advanced Practitioners</td>
<td>7</td>
<td>7/8</td>
<td>Managing a complex case load; may either be a clinical specialist, a manager or both. Significant role in governance, quality assurance, teaching and supervision in addition to their clinical case load.</td>
<td>Descriptive report identifying normality and interpreting normal variants and common pathologies. Second opinions required for pathological and complex US findings/pathology.</td>
</tr>
<tr>
<td></td>
<td>Advanced Clinical Practice Framework / Postgraduate, M-level education</td>
<td></td>
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<tr>
<td>Senior Sonographer</td>
<td>Senior Practitioners</td>
<td>6</td>
<td>6/7</td>
<td>Autonomous practice following period of preceptorship. Responsible for the acquisition, interpreting and reporting of ultrasound examinations across all specialities or specialises in one chosen area of practice.</td>
<td>Descriptive report identifying normality and interpreting normal variants and common pathologies. Second opinions required for pathological and complex US findings/pathology.</td>
</tr>
<tr>
<td></td>
<td>Further education and training which meets CASE standards</td>
<td></td>
<td></td>
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<tr>
<td>Sonographer</td>
<td>Practitioners</td>
<td>5</td>
<td></td>
<td>This role is focussed on the new practitioner. It could equate to the preceptorship period following qualification. They will work with a degree of autonomy and will be managed by an experienced sonographer.</td>
<td>Descriptive report guided by reporting templates. Second opinions required and reports to be supervised and require validation by senior staff.</td>
</tr>
<tr>
<td></td>
<td>Apprenticeship Accredited level 6 study</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistant Sonographer</td>
<td>Assistant Practitioners</td>
<td>4</td>
<td></td>
<td>Working within well-defined boundaries and under supervision</td>
<td>Report within a specific focussed reporting template. List of measurements or findings recorded against strict protocols or scan guidelines. No interpretation.</td>
</tr>
</tbody>
</table>

*These include: Diploma in Medical Ultrasound (DMU), a post graduate diploma in medical ultrasound (PG Dip) or a Masters (MSc) degree in medical ultrasound.

** Currently in development.
## Proposed progression routes for the sonography profession

### Entry Routes
- Practitioner with relevant Master’s equivalent ultrasound / sonography qualification. 

### Band 8
- **Proposed progression routes for the sonography profession**

<table>
<thead>
<tr>
<th>Suggested Band*</th>
<th>Career progression</th>
<th>Career Level</th>
<th>Education, Training, Accountability</th>
</tr>
</thead>
</table>
| 8               | Consultant Practitioners | 8 | CASE accredited MSc programmes may form basis for educational development but education may be sourced from collaborative professions relevant to chosen specialty.  
**Expectation:** To be independently & autonomously scanning and providing descriptive reports on 75% of cases. |
| 7/8             | Advanced Practitioners | 7 | May take the form of PGDip accessing CASE accredited University courses.  
Utilise Advanced Clinical Practice Apprenticeship for advanced / multi-modality reporting in chosen specialty / advanced practice skills / develop interventional skills.  
**Expectation:** To be independently & autonomously scanning and providing descriptive report on 85% of cases. |
| 6/7             | Senior Practitioners | 6 | Education and training may take form of PGCert or in-house training programmes supported by Practice Learning Facilitators. in chosen specialty / advanced practice skills of reporting / communication / pathology. Any education and development provided must meet CASE level 7 learning outcomes.  
**Expectation:** To be independently & autonomously scanning and providing interpretative reports on 95% of cases. |
| 5               | Practitioners | 5 | A preceptorship of around 9 months is strongly advised to support the transition from academia to the workplace. The preceptorship should be a formal programme that supports development of autonomous and independent practice.  
**Expectation:** To be independently & autonomously performing a range of examinations but that indirect supervision is readily available. |
| 4               | Assistant Practitioners | 4 | *These include: Diploma in Medical Ultrasound (DMU), a post graduate diploma in medical ultrasound (PG Dip) or a Masters (MSc) degree in medical ultrasound.  
**Currently in development.* |

*Subject to local job evaluation

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*Subject to local job evaluation

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*These include: Diploma in Medical Ultrasound (DMU), a post graduate diploma in medical ultrasound (PG Dip) or a Masters (MSc) degree in medical ultrasound.  
**Currently in development.*
Young Investigator Award, Euroson Congress

My name is Maria Theodorou and I am a postdoctoral Medical Physicist. Last September, I represented the UK at the Euroson Congress in Ljubljana, Slovenia, as the winner of the BMUS Young Investigator award the previous year. The conference is organised by the European Federation of Societies for Ultrasound in Medicine & Biology (EFSUMB) and promotes engagement and discussion among ultrasound researchers, Radiologists and industry leaders across Europe.

My session was the Young Investigator Session, where I competed with seven other investigators from different European countries, for the Euroson Technical and Clinical Young Investigator Awards. Each participant gave a ten minute oral presentation followed by questions asked by appointed judges in the audience. The session was both enjoyable and stressful. It was really interesting to learn about the different aspects of ultrasound research and clinical practice across many European countries. However, the desire to give a good presentation and win the award was overwhelming.

My presentation went well. I tried to speak clearly and smoothly and keep the audience engaged. It is important to practice the talk beforehand and to respect the allocated time. The judges asked me three clarifying questions. The question part of the competition is important because it serves as another chance to highlight the importance of the work presented.

The same evening everyone attended the Gala Dinner. This was a formal gathering with live music. The awards were announced later that evening and I was delighted to be awarded the non-clinical Euroson Young Investigator Award. Overall, attending Euroson was a great experience and I wish the best of luck to Marćia Costa, the winner of the 2017 BMUS Young Investigator, at the Euroson Congress being held in Poznan, Poland this year.

Maria Theodorou
Young Investigator 2016

BMUS
Head & Neck Ultrasound Training Day

26th April 2018 | Hull

The Hull Head and Neck Ultrasound Course – with practical hands-on scanning experience. To be delivered by a dedicated team of established Sonographers and Radiologists in the field of Head and Neck ultrasound in conjunction with the British Medical Ultrasound Society.

This course will outline the uses of Ultrasound in the head and neck by a series of practical live demonstrations and multiple “hands-on sessions”.

CPD Accredited | www.bmus.org
April
BMUS Gynaecology Ultrasound Study Day
19th April, Novotel Paddington, London

BMUS Head & Neck Ultrasound Training Day
26th April, Hull

May
BMUS MSK Study Weekend
12th - 13th May, Keele University

June
International Hepatology Ultrasound Course
1st - 3rd June, London

EUROSON School CEUS Course:
How to incorporate CEUS into your imaging practice
11th - 12th June, London

BMUS MSK Dissection Cadaveric Course
23rd June, Keele University

BMUS Summer School
28th - 29th June, Leeds

Each year, BMUS runs a varied programme of educational study days and courses across the country. In 2018, we will once again be running a full programme of study days as outlined above.

All courses carry BMUS CPD Points.
For all of 2018’s programmes and to register, please visit www.bmus.org