

Day 1 - Tuesday 6th December 2022

Plenary 1	Plenary 2	Plenary 3	Plenary 4	Practical
General Medical and Paediatrics	Professional Issues	Ultrasound Physics	Student and Trainee Session	
<p>Ultrasound in Bowel Disease</p> <p>This session intends on providing an overview on leading ways for the use of ultrasound in a variety of settings for bowel pathology.</p> <ul style="list-style-type: none"> <li>- Demonstrate how ultrasound can help in the diagnosis of children with GI symptoms</li> <li>- Guide to using ultrasound in patients with IBD</li> <li>- Guide to setting up a bowel ultrasound service in radiology departments</li> <li>- Overview of ultrasound in bowel cancer</li> </ul>	<p>Professional Issues sessions will focus on Maximising Ultrasound Services. It will explore Preceptorship and Capability Development and how it could become successfully embedded within departments. It will examine how department leaders can support more of their staff to achieve true Advanced Practitioner and Consultant level. In addition the session will examine the practicalities of workload in addressing Quantity Vs Quality – how do you decline the unjustified examination?</p>	<p>New and improved technologies for medical ultrasound imaging</p> <p>Over the last few years, medical ultrasound imaging has continued to develop at an astonishing rate, with exciting new technologies being introduced by start-up companies, and established technologies being further refined by the major manufacturers. This session explores some of these technologies, and explains how sonographers, radiologists and other clinicians can make use of them in their day-to-day scanning.</p>	<p>The aim of this BMUS training focused day is to enhance the students', trainees' and newly qualified sonographers' knowledge and understanding of the professional issues surrounding ultrasound practice to prepare them for their careers in the rapidly changing landscape of ultrasound.</p> <p><i>As a student or trainee you may have been involved with some interesting initiatives of clinical application for example evaluated new technology, explored professional issues regarding sonography or even seen some unusual cases.</i></p> <p><i>The findings from MSc projects, audits or service evaluations are also important research activities for dissemination to the wider audience. The BMUS Training Stream is an ideal forum for you to present your work and share good practice with your peers. This is also a very good opportunity to develop and enhance your presentation skills in a safe and supportive environment and get feedback if you intend to publish your work.</i></p> <p><i>Supervisors, mentors and managers are asked to actively encourage and support their students and trainees to proffer papers for this conference.</i></p>	
<p>Ultrasound in renal disease</p> <p>This session provides insights into how ultrasound is used in diagnosing and managing renal disease, looking at advancing techniques and technology.</p> <ul style="list-style-type: none"> <li>- Guide to ultrasound imaging of cystic renal disease in children and how to differentiate varying presentations.</li> <li>- Guide to the types of renal diseases evaluated with ultrasound</li> <li>- How CEUS can be used as a first line investigation for renal cysts.</li> </ul>	<p>The magnificent debating chamber of Cardiff City Hall provides an outstanding and perfect venue for the return of the BMUS Debate</p>	<p>The old and the new – the past, present and future of ultrasound imaging</p> <p>Since the first ultrasonic devices were invented, over a hundred years ago, ultrasound technology has become the bedrock of an extremely wide range of medical and non-medical applications. This session looks at some of these applications, and considers what additional medical information may be available to sonographers in the very near future.</p>		<p><b>Bowel Ultrasound Master Class</b></p> <p>Bowel ultrasound is increasingly being desired for many radiology and gastroenterology departments. This workshop intends to increase ultrasound practitioners confidence in scanning and evaluating the small bowel, appendix and colon on ultrasound. Expert faculty will guide participants through the technique of bowel ultrasound with hands on experience in small groups with helpful hints and tips.</p>
<p>Ultrasound in liver disease</p> <p>This session provides insights into how developing technology and reporting is moving ultrasound of liver disease into the future.</p> <ul style="list-style-type: none"> <li>- How advanced ultrasound imaging is used in paediatric liver disease</li> <li>- The role of ultrasound in screening and surveillance of liver disease.</li> <li>- Radiological treatment for liver lesions, current practice and future developments.</li> </ul>	<p>As BMUS looks to guide ultrasound and its practitioners into the future, we address How Does Ultrasound Move Forwards in a World Without Regulation? Regulation and the protected title of 'Sonographer' has been the long term goal of professional ultrasound bodies in the UK for many years, but where are we now and what does the future look like if the ambition of regulation cannot be achieved?</p>	<p>Imaging safely and effectively using modern ultrasound scanners</p> <p>As our understanding of subtle bioeffects improves and additional imaging features are integrated into new ultrasound equipment, it is vital that users have access to this information and are able to apply it during their routine daily scanning. This session provides an overview of our current knowledge of ultrasound safety, and shows how sonographers, radiologists and obstetricians can scan safely and effectively using the most up-to-date devices.</p>		<p><b>Obstetrics Workshop</b></p> <p>Sign up for a 30 minute guided simulation session during which you will work through cases looking at:</p> <ul style="list-style-type: none"> <li>• the implications of caliper placement on measurement of the posterior horn</li> <li>• changing from ellipse to diameters in assessing fetal growth and EFW</li> <li>• deciding which Doppler trace is 'best'</li> </ul>

16.00 Donald MacVicar Brown Keynote Lecture -

Day 2 - Wednesday 7th December 2022

Plenary 1 Obstetrics 1	Plenary 2 Head and Neck 1	Plenary 3 Young Investigator	Plenary 4 Thunddar Session	Practical DVT Lower Limb
Imaging across the trimesters – AI, biochemistry & genomics - NT, anatomy, NIPT, exome sequencing – where is first trimester screening going? - Artificial intelligence and fetal biometry - Biochemical markers, imaging and outcomes	There has been a hiatus in the presence of head and neck ultrasound on the BMUS programme but it's back and with aplomb! The head and neck sessions will as always aim to provide innovative and highly educational content to expand the knowledge of the ultrasound practitioner. Ultrasound of the Oral Cavity and Pharynx – is it something we all should be doing? Head and Neck Masses – what are they and what should I be doing with them? Do ultrasound practitioners know what happens to their patients after the scan? This session will look at the prognosis and management of thyroid cancer following diagnosis and the importance of ultrasound in the journey. With innovations and advances in practice the world of head and neck ultrasound is always moving forwards and evolving, these sessions will aim to take BMUS delegates on that journey.	During this session 6 short-listed oral papers from submitters under the age of 39 will battle it out to win the title of BMUS Young Investigator 2022 and the prize of representing the UK at the EUROSON 2023 Congress in Riga, Latvia. Further details can be found on the awards page.	Information on this stream will be available at a later date	Upper Limb scanning technique / anatomy
<b>Obstetrics 2</b> Putting guidelines into perspective – how many do we need? - The pitfalls of uterine artery Dopplers – a practical guide ☑Capacity versus demand - Are the KPIs for SBLv2 working?		<b>Extreme Ultrasound (POCUS)</b> Ultrasound taken to the Extreme This session is to look at the use of ultrasound in some of the more extreme settings. As ultrasound has grown as a modality it has exceeded the boundaries of Radiology and Obstetric departments or even hospital environments and now gets used in some of the most extreme environments on (and off) earth. We will look at examples of people using ultrasound on the battleground, in pachyderm programmes, non-medical uses and even in space.	<b>Thunddar Session</b> Information on this stream will be available at a later date	<b>DVT Upper Limb</b> Lower Limb scanning technique/ anatomy
<b>Obstetrics 3</b> Educating sonographers, the profession and the service – time for a rethink?	<b>MSK 1</b> Guidelines and pathways in MSK Ultrasound	<b>POCUS 2</b> Education, training and governance – how is PoCUS doing?	<b>Thunddar Session</b>	<b>Head and Neck Practical</b>
☑ Those first two sentences – what, how and when. Getting it right when there's a problem ☑ Limbs, hearts, images, screening and barristers ☑ An obstetric sonographer career pathway. A vision through rose tinted glasses	The use of guidelines and clinical pathways are fundamental in the diagnosis and management of patients. This session looks at specific and complex areas of musculoskeletal Ultrasound, including pediatrics, trauma and adult groin/hip. Presenters have extensive experience of using Ultrasound in their fields and will discuss guidelines, Ultrasound features and management of these patients.	PoCUS training is increasingly being incorporated into many curricula, so potential numbers of trainees are likely to increase significantly. What innovations in education, training and assessments are emerging, and can we deliver this with sustained clinical pressures? Once competent, are we really the finished articles or do we still need to be supported? How can we use digital technology to record our PoCUS activity and governance around keeping my images/clips?	Information on this stream will be available at a later date	Following feedback from recent years, the ASM in Cardiff sees the return of the popular 'hands on' Head and Neck Workshop. Expert faculty will provide demonstrations and anatomy of the '7 sweep neck' technique breaking into smaller groups to consolidate learning and have time to ask questions.
<b>Axrem Debate</b>	<b>MSK 2</b> <b>Emerging roles in MSK Ultrasound</b>	<b>Pocus 3</b> The clinical application of PoCUS	<b>Thunddar Session</b>	
The Future of Ultrasound – The Industry Perspective'	Musculoskeletal Ultrasound is performed by a variety of healthcare practitioners, not just in Radiology and within a dedicated scope of practice. Specific roles have been established for these practitioners who deliver specialised clinical services and interventions. Speakers will give their insight of these roles, service delivery and the use of Ultrasound in their practice.	PoCUS practice continues to evolve, but does it make a difference and improve patient care, or does it cause extra workload for everyone else? What are the new contemporary applications of PoCUS, especially in haemodynamics. Many modern PoCUS machines come with smart features but is this a hindrance or blessing?	Information on this stream will be available at a later date	

Day 3 - Thursday 8th December 2022				
Plenary 1	Plenary 2	Plenary 3	Plenary 4	Practical
Gynae and Early Pregnancy	Intervention	Vascular 1	Veterinary	MSK Workshop 1 and 2
Multiple pregnancy – there’s more to it than a couple of gestation sacs				
<ul style="list-style-type: none"> <li>- Twinning in early pregnancy - understanding the embryology</li> <li>☒ Twinning in early pregnancy – ultrasound (tips &amp; pitfalls)</li> <li>- ‘Early pregnancy communication – are we getting it right?’</li> </ul>	<p>Image guidance is becoming standard practice for most interventional procedures. Ultrasound has a crucial role in ensuring that many interventional procedures are undertaken safely and effectively. This session will look at some of the applications where ultrasound image guidance adds value. It will also examine the scope of practice and governance frameworks for those looking to extend their practice into ultrasound guided interventions.</p>	<p>The first session will look at how duplex ultrasound is moving into the future, including the current grading criteria for carotid duplex along a potentially new topic around the uncertainty of measurements in vascular ultrasound. The use of 3D ultrasound in the assessment of carotid plaque.</p> <p>This session will also cover the topic of venous stenting and the assessment of venous stents, the pitfalls in assessing the venous system post venous ablation, and the role of venous duplex in the assessment of leg ulcers.</p>	<p>Aims of BMUS ASC 2022 Veterinary Stream are to:</p> <ol style="list-style-type: none"> <li>1. Cover a range of interesting topics and case studies which promote the use of diagnostic ultrasound as a necessary adjunct to effective patient management.</li> <li>2. Continue to promote high standards of clinical ultrasound practice and diagnostic confidence by inviting thought-provoking speakers from a multitude of clinical veterinary ultrasound backgrounds, including expert veterinary specialists, to share their experiences and invaluable clinical knowledge.</li> <li>3. Empower multi-disciplinary professionals from both the Veterinary and Medical professions to work better together, improving the quality and standards of small animal ultrasound practice.</li> <li>4. Provide an overview of ultrasound governance – how the veterinary field can benefit from lessons learnt within the NHS</li> <li>5. Abdominal Point of Care and Basic Cardiac Ultrasound – Those all-important considerations for proper ultrasound practice!</li> </ol>	<p>The practical workshops are aimed at those practitioners with MSK Ultrasound experience, wishing to improve their knowledge and skills in advanced techniques. The areas covered include shoulder and elbow, hip/groin, foot and ankle, complex hand and Ultrasound guided MSK intervention. Delegates will receive maximum benefit from small group tutoring and lots of hands on practice with an experienced Physiotherapist, MSK Sonographers and Radiologist facilitating the stations.</p>
Gynae	AI Implementation	Vascular 2		
Time to embrace new technologies?	Artificial Intelligence in Ultrasound			
<ul style="list-style-type: none"> <li>☒ Fertility scan – what should we be looking for?</li> <li>☒ 3D ultrasound scans – how to do and classify uterine congenital anomalies</li> <li>☒ Addressing the skills of the gynae sonographer – time for a rethink?</li> </ul>	<p>This session is to look at the use of artificial intelligence in ultrasound. We are surrounded by artificial intelligence in our daily life and these principles are making their way into medicine. Radiology and ultrasound are prime candidates for the integration of AI deep learning as it relies on high volume, pattern recognition and risk stratification. It is almost certainly on the ultrasound machine you are already using and you will likely already be using it on a daily basis whether you are aware of it or not but where will it go from here?</p>	<p>This session look at the role of vascular ultrasound in assessing pathologies or the SMA and sciatic artery. Whether the iliac and calf veins should be scanned routinely as part of the assessment for deep vein thrombosis and the pitfalls in assessing the DVT patient. Also the role of vascular ultrasound in endo-AVF screening, creation and surveillance.</p>		
Gynae	MSK 3	Prof Issues 4		
Master class in Endometriosis	Specialised MSK ultrasound	Collaborations and Innovations – How to Take Ultrasound into the Future.		
<ul style="list-style-type: none"> <li>☒ Diagnosing endometriosis what this means for the patient</li> <li>☒ ‘Reconsidering the ultrasound diagnosis of endometriosis’</li> <li>☒ ‘What the clinician needs to know – a Gynaecologist’s perspective’</li> </ul>	<p>This session is focused on specific areas of complex MSK Ultrasound and is aimed at healthcare professionals who wish to broaden their knowledge and practice. Speakers in this session reflect the diversity of professionals using Ultrasound in sports injuries, Sarcoma MDT and chronic pain.</p>	<p>Collaboration and innovation takes many forms within ultrasound and BMUS explores how these can be maximised to ensure high value to all stakeholders and the profession. This session will explore the safety of practitioners of the in an ever increasing litigious world and how understanding the pearls and pitfall of medico legal issues could make you a better, safer practitioner of the future. Is the future here now? We consider the use of <b>artificial intelligence</b> and the ultrasound practitioner perceptions and attitudes towards it, is this collaboration with the robots a step too far?!</p>		