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• Ultrasound 2023
Dear Friends, Colleagues and BMUS Members,

In celebration of the 75th anniversary of the NHS, it is important to recognise the impact that ultrasound technology has had on patient care and the collaboration between the British Medical Ultrasound Society (BMUS) and the NHS, where both organisations have played significant roles in the advancement of medical technology and healthcare in the United Kingdom.

BMUS was established in 1958 as a professional body for those involved in ultrasound imaging and research. Over the past 55 years, our society has grown to become a leading authority in the field, promoting education, research and standards of practice in medical ultrasound. It has been instrumental in advancing the knowledge and skills of healthcare professionals, ensuring the safe and effective use of ultrasound technology across various medical disciplines.

One of the significant contributions of the BMUS to the healthcare sector is its commitment to education and training. The society organises regular conferences, workshops and training courses to enhance the skills and knowledge of ultrasound practitioners from all disciplines. These events provide a platform for professionals to exchange ideas, share research findings and stay updated with the latest advancements in ultrasound technology. By promoting education and training, BMUS has played a crucial role in ensuring that healthcare professionals are equipped with the necessary skills to provide accurate diagnoses and deliver high-quality patient care.

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The NHS celebrates its 75th anniversary as a cornerstone of the UK healthcare system. Since its inception in 1948, the NHS has been committed to providing healthcare services that are free at the point of delivery, based on need and not the ability to pay. The NHS has been a vital institution in the provision of healthcare to millions of people, offering a wide range of services from primary care to specialised treatments.

Ultrasound technology has become an integral part of diagnostic work in patients, enabling the visualisation of internal structures and diagnosis of various medical conditions without any radiation or detriment to patients.

The impact of ultrasound technology in the NHS is far-reaching. Ultrasound scans have become routine procedures in prenatal care, allowing expectant parents to monitor the development of their unborn child and detect any potential abnormalities. Moreover, ultrasound imaging is now widely used in the diagnosis and monitoring of various conditions, such as cardiovascular diseases, abdominal disorders and musculoskeletal injuries. Many of these applications were thought not feasible 30 years ago. It is also heartening to know that diagnostic ultrasound is now being embraced across many specialities and that point-of-care ultrasound is becoming common practice.

One key area of work and collaboration between BMUS and the NHS is the resultant development of guidelines and standards for the use of ultrasound technology, ensuring its safe and effective implementation in clinical practice. It also provides standards that all clinical ultrasound users should aim to achieve and maintain.

Overall, we should be proud that our Society’s commitment to education and training has played a vital role in enhancing the skills and knowledge of healthcare professionals in the field of medical ultrasound. The NHS has provided a platform for the safe and effective implementation of ultrasound technology in clinical practice, resulting in improved patient outcomes. As both organisations celebrate the anniversary, it is evident that the symbiosis has been instrumental in the advancement of healthcare in the UK.

Happy celebrations and all the best wishes for a great summer!

Warmest wishes,

Professor Adrian Lim, MD FRCP FRCR
BMUS President 2023
Physicists have always played an important role in BMUS. Indeed, eight past presidents have come from the medical physics community.

The remit of the Physics and Safety Group is to develop and promote safety guidelines for the diagnostic and therapeutic use of ultrasound and to also advise BMUS and its members on developments in the physics and technology of ultrasound. The group consists of a mixture of physicists from the NHS and academia, sonographers and clinicians from several specialities. The group has recently had some comings and goings, so at present there are four physicists, two obstetricians and three sonographers from radiology and neonatal specialities.

In 2009, the P&S group produced a comprehensive set of guidelines on the safe use of diagnostic ultrasound. This document was recognised and endorsed by many other national ultrasound societies and the World Federation of Ultrasound in Medicine & Biology (WFUMB). At present, the P&S group is in the process of revising these guidelines in collaboration with WFUMB and other national ultrasound societies to harmonise all the safety guidelines – so watch this space for an updated document.

In 2021, the P&S group conducted a survey on awareness of safety issues within our membership. The take-home messages from the survey were that more training and education is required to increase knowledge of safety within certain specialities; users should be aware of the safety aspects of new technologies, such as shear-wave elastography; and the P&S group needs to increase its visibility.
Over the past few years, the P&S group has either contributed to or collaborated to produce several specific guidelines that cover both safety and governance issues in ultrasound.

These are summarised below:

1. BMUS/AXREM/SCoR document on ultrasound transducer decontamination (2020)
2. Statement on the safe use of Doppler in fetal 2nd- and 3rd-trimester scanning (2021), which has recommendations for the use of pulse-wave Doppler for umbilical, MCA & ductus venosus examinations
3. BMUS/BAPM guidelines for safe scanning of the neonate (2021)
4. EFSUMB/BMUS publication on Best Practice recommendations for the safe use of Lung Ultrasound (2022)
5. AXREM/BMUS statement to encourage ultrasound manufacturers to use ALARA principles when setting the acoustic output levels for clinical pre-sets (2023)
6. RCR/BMUS guidelines on safety and governance for specialists practising outside of radiology departments (2023)
7. AXREM/BMUS/IPEM guidance on the procurement of preowned ultrasound equipment (2023)

At present, the P&S group is working on several projects covering subjects such as transducer cleaning methods, the governance of baby-bonding clinics and the use of home ultrasound imaging devices by the public.

The P&S group is always happy to listen to suggestions and ideas from BMUS members, and we would welcome collaborations in clinical projects with our members.

Prashant Verma
Chair, BMUS Physics & Safety Group
A day in the life of a research Sonographer

Inflammatory arthritis can affect anybody at any age so we get a variety of participants walking through our doors.

One of the things I love the most about my job is the variety; I have a great mix of clinical work, academic work and some teaching on the side.

I work at the NIHR Leeds Biomedical Research Centre (BRC), and my clinical work consists of performing mainly musculoskeletal ultrasound scans for rheumatology research. I scan participants who have an inflammatory arthritis such as rheumatoid arthritis or psoriatic arthritis. Some trials are observational, where the researchers review how the participants progress over time; other trials are clinical drug trials, where the researchers review the efficacy of one drug over another. For each participant, I scan a combination of hands, wrists, elbows, knees, ankles and feet, assessing each joint for synovitis, tendons for tenosynovitis and grading the grey-scale image and power Doppler findings. If the research trial is for psoriatic arthritis, I also scan the enthesis at the elbow, knee and ankle/foot, and grade those appearances as well. Dependent on the research trial, a scan can last anything from 45 minutes to 90 minutes, and the participants can return every 3–6 months, which means you have a chance to get to know them.

Inflammatory arthritis can affect anybody at any age, so we get a variety of participants walking through our doors. Today I am going to scan Jack, 68, returning for his 3-month scan. He has been having problems with his Alsatian puppy; he was hoping puppy-training classes would make his daily walks more enjoyable. Jennifer, 44, returning for her 5-year scan, was changing jobs and moving house the last time she came for a scan; slightly stressed didn’t cover it, and I hope things have settled down for her. Alina, 28, is attending for an 18-month scan. She brings her little girl with her, and seeing her change from a baby to a beautiful cheeky toddler has been great. Alina has found it difficult getting people to believe she has rheumatoid arthritis owing to her age. I also have a couple of new participants attending for baseline scans; I haven’t met these participants yet, so I am excited to find out about them.
Checking my emails, I see we have a referral for a temporal artery scan for giant cell arteritis (GCA); we provide these scans for the NHS. I check if I have space to scan them today. As patients with GCA can go blind if left untreated, they are often started on glucocorticosteroids before their scan. Steroids can change the ultrasound appearances so we book them for a scan ASAP and within 3 days at a maximum. For GCA, we scan both sides of the head, looking at the common temporal artery, frontal and parietal branches, assessing for “halo” and the “compression sign”. I also scan the axillary arteries, as a thickened intima-media complex can indicate large vessel vasculitis. I am reminded of a patient who attended last month, George, who arrived with his wife. George was 93 years young and his wife 92. They had been married for 70 years and they were a sight to behold. They finished each other’s sentences, she helped him get dressed and he helped her put her coat on, all without words; you could tell this was something they did all the time. They left the department holding hands, and it just warmed the soul. Today’s patient is 73, and has a new headache over the left temporal region. It hurts to brush their hair and they have been feeling generally unwell for the last couple of weeks. Their blood inflammatory markers are raised so they were started on steroids when seen on the assessment unit yesterday evening. It sounds like GCA, so I am not surprised when the scan is positive. I arrange for the patient to see the GCA registrar immediately following the scan.

The rest of my day consists of finalising my manuscript, which I am hoping to get published. It’s based on some research I did for my Masters in clinical research dissertation, and I hope it is reviewed well.

Whilst not scheduled for today, the sonographers at the BRC assist in teaching the medical students, musculoskeletal and vascular ultrasound as part of their curriculum, and sometimes researchers come for teaching too. We organise and present at educational courses that have national recognition. The BRC also runs patient, public involvement and engagement (PPIE) events; we have supported these both face-to-face and virtually, informing the public about ultrasound and how we are involved in research. We have a great PPIE group and were nearly overwhelmed with the number of volunteers when we put out a call for help with our recent GCA course.

Having the time to work clinically and on items such as publications, research protocols, monitoring visits, PPIE events and teaching just adds to the variety and my enjoyment.

Kate Smith,
Research Sonographer
Meet the BMUS Office Team

EMMA TUCKER
BMUS Operations and Development Manager

I studied politics at the University of Portsmouth and spent the first 12 years of my career working in Local Government. I finished up my time in Local government managing the District Councils Network. This sister organisation of the Local Government Association represented their interests to central government.

I joined BMUS 7 years ago as the BMUS Development Manager, in this role I supported the delivery of our educational programme and supported BMUS Committees to deliver the BMUS aims.

In my new role as BMUS Operations and Development Manager, I am responsible for the BMUS Office team, ensuring we meet our charitable aims and deliver the Annual Scientific Meeting. I work closely with both the BMUS Officers team and Council to further the development of BMUS. I look forward over the coming years to further develop BMUS in to a modern Society meeting the needs of Ultrasound users.

Contact Emma on emma@bmus.org

HAZEL EDWARDS
BMUS Professional Officer

I’ve been a radiographer/sonographer for 35 years, with many different roles, including years and years of clinical imaging, of course, but also roles as a clinical supervisor, consultant, university lecturer and researcher, moderator, project lead, author, reviewer, editor and now Professional Officer. All of these past roles help me to do my job at BMUS.

The opportunity to work for BMUS came just at the right time for me, and I joined a really great team of dedicated and seasoned professionals. I knew most of them already because of the work I’d done for BMUS on and off over the years, so I felt I knew what I was letting myself in for. Hopefully, they did too.

My hidden talent is that I can say the alphabet backwards really fast (it’ll come in handy one day, I’m sure). Also, I’m trained in how to repair dry stone walls, which I do regularly with a team of local wallers.

Contact Hazel on ProfessionalOfficer@bmus.org
TRACEY CLARKE
BMUS Office Administrator

I have worked in admin roles pretty much all of my working life. I’m well-organised and happy to jump in and help when needed, keeping things ticking along nicely in the BMUS office and helping to support my colleagues.

In my role as BMUS Office Administrator, I am responsible for all things membership, deliver the technical exhibition for our Annual Scientific Meetings and ensure the office and office team have everything they need.

I love to spend time with my grandchildren as and when I can, and I enjoy cooking.

Contact Tracey on tracey@bmus.org

COURTNEY SCOTT
BMUS Events Coordinator

As the new Events Coordinator, I’m the newest addition to the team.

I recently emigrated to the UK from South Africa, and have brought a touch of South African flair to BMUS.

I earned a double post-graduate degree in Fine Art Practice and Art History and Visual Culture from Rhodes University in South Africa, and then channelled my passion for art into teaching for a number of years, before moving to London to work in events.

My love of education, combined with an events background, drew me to my present work role, which I thoroughly enjoy.

When I’m not in the office, I can be found working on my small painting business, Little Magpie Art, selling fine art commissions or exploring the UK with my partner and my dog, Ziggy, in our camper van.

Contact Courtney on Courtney@bmus.org

MARTHA WORTHINGTON
BMUS Marketing & Communications Officer

Like Courtney, our new Events Coordinator, I’m a relative newcomer to BMUS.

My role of part-time Marketing and Communications Officer is a busy and varied one, which is why I enjoy it so much. I spend the majority of my time creating the artwork and text to promote the activities of BMUS and our associates on social media as well as in Ultrapost, the BMUS weekly e-newsletter. Because I’ve got a publishing background (mainly as a proofreader and generalist writer), I’m a bit of a stickler for grammar and punctuation. I also like expanding my software experience, whether it’s with content-management systems, Adobe products or social media and social-media-related apps.

I’m proud to be a part of BMUS, and look forward to meeting you at our upcoming events, including the Annual Scientific Meeting in December.

Contact Martha on Martha@bmus.org
BMUS 2022 Young Investigator Wins Euroson 2023 Young Investigator Award

BMUS 2022 Young Investigator, Adam Morrell, a sonographer from Leeds Teaching Hospitals NHS Trust, came first in the Euroson 2023 Young Investigator competition held in Riga in late May. He beat eight other Young Investigators from around Europe to win the prestigious prize.

Warmest congratulations, Adam!

Read details of his award-winning research, The first 2-5 targeted transperineal prostate biopsies diagnose the majority of PROMIS criteria cancer in patients with a Likert 4 or 5 score on mpMRI.

We look forward to finding our next BMUS Young Investigator at our upcoming Annual Conference in York in December.

Pictured left to right: Professor Adrian Lim, BMUS President; Adam Morrell, winner of Euroson 2023 Young Investigator Award; Mrs Hazel Edwards, BMUS Professional Officer
The 54th Annual Scientific Meeting of the British Medical Ultrasound Society

5th-7th December 2023
York Racecourse, York

BMUS 2023 will have something for all practitioners engaged in ultrasound, including:

- General Medical
- Obstetric
- Gynaecological
- Musculo-skeletal
- Head and Neck
- Paediatrics
- Vascular
- Physics
- Professional Issues
- Practical Training Sessions

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